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# MEETING NOTICE AND AGENDA

## COMMITTEE ON BINATIONAL REGIONAL OPPORTUNITIES

The Committee on Binational Regional Opportunities (COBRO) may take action on any item appearing on this agenda.

Tuesday, September 2, 2014

3 to 4:30 p.m.

SANDAG, 7th Floor Conference Room  
401 B Street, Suite 800  
San Diego, CA 92101-4231

Staff Contact: Hector Vanegas  
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## AGENDA HIGHLIGHTS

- **OUTCOMES FROM THE 2014 BINATIONAL SEMINAR AND TASK FORCE RECOMMENDATION**
- **2014 TIJUANA INNOVADORA EVENT UPDATE**
- **OVERVIEW OF TIJUANA TE QUIERO**

## MISSION STATEMENT

*The Committee on Binational Regional Opportunities (COBRO) will advise the Borders Committee of the San Diego Association of Governments (SANDAG) concerning both short- and long-term binational related activities, Issues, and actions; provide input regarding binational border-related planning and development; and identify ways to assist and coordinate with existing efforts in the binational area. The COBRO will serve as a working group to the SANDAG Borders Committee to facilitate a better understanding of the binational border-related issues and needs of the California-Baja California region .*

### MEMBER AGENCIES

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Carlsbad  
Chula Vista  
Coronado  
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Escondido  
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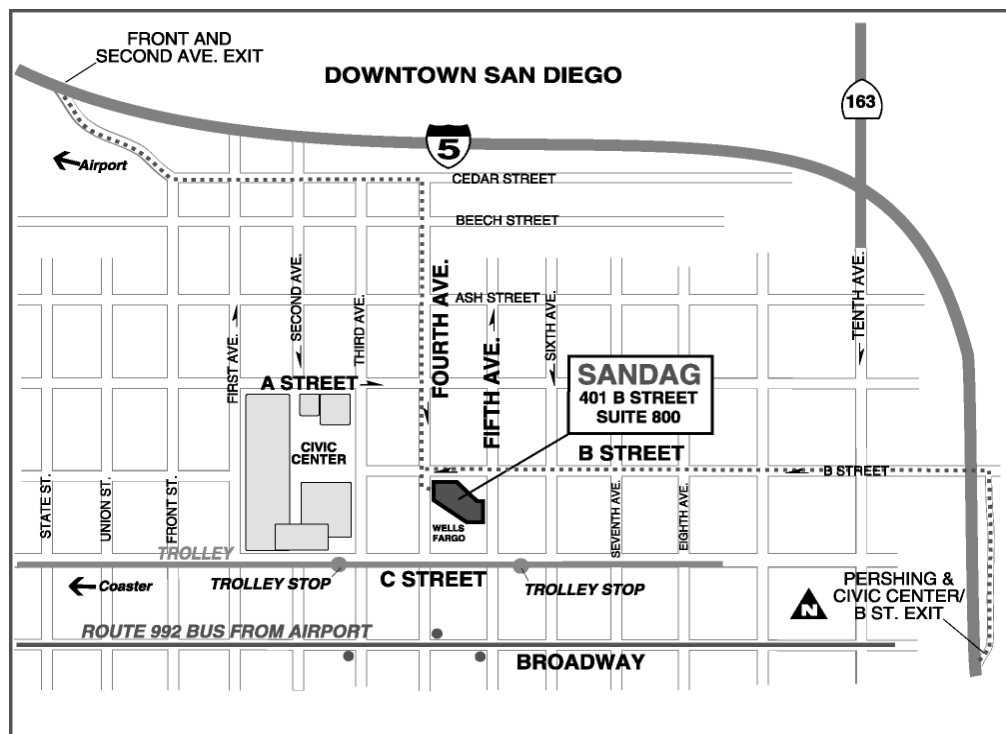


Welcome to SANDAG! Members of the public may speak to the COBRO on any item at the time that the Committee is considering the item. Please complete a Speaker's Slip which is located in the rear of the room and then present the slip to Committee staff. Also, members of the public are invited to address the Committee on any issue under the agenda item entitled Public Comments/Communications. Speakers are limited to three minutes. The COBRO may take action on any item appearing on the agenda.

This agenda and related staff reports can be accessed at [www.sandag.org](http://www.sandag.org) under meetings on SANDAG's website. Public comments regarding the agenda can be forwarded to SANDAG staff. Comments should be received no later than noon, two days prior to the COBRO meeting.

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# COMMITTEE ON BINATIONAL REGIONAL OPPORTUNITIES

Tuesday, September 2, 2014

| ITEM NO.       |  | RECOMMENDATION |
|----------------|--|----------------|
| 1.             | WELCOME AND INTRODUCTIONS  |                |
| +2.            | APPROVAL OF MEETING MINUTES<br><br>The COBRO is asked to review and approve the minutes from its:<br>+a) February 4, 2014, meeting.<br>+b) May 6, 2014, meeting.   | APPROVE        |
| 3.             | PUBLIC COMMENTS/COMMUNICATIONS AND MEMBER COMMENTS<br><br>Members of the public shall have the opportunity to address the COBRO on any issue within the jurisdiction of SANDAG that is not on this agenda. Anyone desiring to speak shall reserve time by completing a "Request to Speak" form and giving it to the COBRO coordinator prior to speaking. Public speakers should notify the COBRO coordinator if they have a handout for distribution to COBRO members. Public speakers are limited to three minutes or less per person. COBRO members also may provide information and announcements under this agenda item. | INFORMATION    |
| <b>CONSENT</b> |  |                |
| +4.            | UPCOMING EVENTS  | INFORMATION    |
| +5.            | COBRO CALENDAR OF MEETINGS FOR FISCAL YEAR 2015<br>(Hector Vanegas)  | INFORMATION    |
| <b>REPORTS</b> |  |                |
| +6.            | OVERVIEW OF SELECT SAN DIEGO-BAJA CALIFORNIA BORDER REGION ISSUES (Tayah Wheeland)<br><br>This draft report provides an update on a few of the critical planning areas that the Borders Committee identified to focus its collaborative efforts on. It includes a brief synopsis of the binational issues of access to jobs and housing, transportation, energy and water, and environment, which all affect the San Diego-Baja California border region.  | INFORMATION    |
| +7.            | OUTCOMES FROM THE 2014 BINATIONAL SEMINAR - "EFFICIENT BORDER: A GLOBALLY COMPETITIVE REGION" AND TASK FORCE RECOMMENDATION (Chair Paul Ganster)<br><br>The COBRO Binational Seminar Task Force met on August 5, 2014, to discuss the outcomes of the 2014 Binational Seminar held on June 3, 2014, and to prepare recommendations for COBRO's review and input. Based on input received from COBRO, these recommendations will be forwarded to the Borders Committee for action.  | RECOMMEND      |

|           |  |                    |
|-----------|--|--------------------|
| <b>8.</b> | <b>2014 TIJUANA INNOVADORA EVENT UPDATE</b><br><b>(Laura Araujo, Tijuana Innovadora)</b> | <b>INFORMATION</b> |
|-----------|--|--------------------|

Tijuana Innovadora is an organization comprised of border region residents who love Tijuana and work together to promote innovative ideas to improve the city and the region. The third Tijuana Innovadora expo will be held from October 16 to 26, 2014. This year's event will showcase the binational Tijuana-San Diego relationship, and promote broader collaboration between Mexico and the United States, and between Mexicans and Mexican-Americans.

|           |  |                    |
|-----------|--|--------------------|
| <b>9.</b> | <b>OVERVIEW OF TIJUANA TE QUIERO</b><br><b>(Monica Schroeder, Tijuana Te Quiero)</b> | <b>INFORMATION</b> |
|-----------|--|--------------------|

Tijuana Te Quiero is an initiative to improve the border crossing experience for pedestrians travelling from Tijuana to San Diego. This presentation will provide information on the initiative's history, activities, and community involvement.

|            |                          |                    |
|------------|--------------------------|--------------------|
| <b>10.</b> | <b>NEXT MEETING DATE</b> | <b>INFORMATION</b> |
|------------|--------------------------|--------------------|

The next meeting of the COBRO is scheduled for Tuesday, November 4, 2014, from 3 to 4:30 p.m., at SANDAG.

+ next to an item indicates an attachment

**San Diego Association of Governments**  
**COMMITTEE ON BINATIONAL REGIONAL OPPORTUNITIES**

September 2, 2014

AGENDA ITEM NO.: **2a**

**Action Requested: APPROVE**

MINUTES OF THE FEBRUARY 4, 2014, MEETING

File Number 3400200

**1. WELCOME AND INTRODUCTIONS**

The February 4, 2014, Committee on Binational Regional Opportunities (COBRO) meeting, was called to order by Chair Paul Ganster, Institute for Regional Studies of the Californias, San Diego State University (SDSU) at 3 p.m.

Members present were: Chair Paul Ganster, Institute for Regional Studies of the Californias at SDSU; Guadalupe Leyva and Consul General Remedios Gómez Arnau, Consulado General de Mexico en San Diego; Efraín Ibarra, South San Diego County Economic Development Council; Sergio Pallares and Mario Orso, Caltrans; Mario Lopez, City of San Diego; Tito Alegria, El Colegio de la Frontera Norte (COLEF); Elizabeth Uresti, State of Baja California; Nathan Owens, The San Diego Dialogue; Daniel Rubio, Rodolfo Argote and Oscar Cano, Instituto Metropolitano de Planeación de Tijuana (IMPLAN); Cecilia Luken and Yolanda Walther-Meade, Fundación Internacional de la Comunidad, A.C.; Paola Avila, San Diego Regional Chamber of Commerce; Chris Peregrin, Tijuana River National Estuarine Research Reserve; Isaac Mafud and Blanca Morales, Universidad Iberoamericana Tijuana; and Dave Fege, U.S. Environmental Protection Agency Border Liaison Office.

SANDAG staff members present were: Héctor Vanegas, Tayah Waterhouse, Samuel Johnson, Christina Casgar, and Scott Strelecki.

**+2. SUMMARY OF MEETING**

Upon a motion by Yolanda Walther-Meade, Fundación Internacional de la Comunidad, A.C., and a second by Mario Lopez, City of San Diego, COBRO unanimously approved the summary of the November 5, 2013, meeting.

**3. PUBLIC COMMENTS/COMMUNICATIONS AND MEMBER COMMENTS**

Chair Paul Ganster invited the members and the public to share any comments or upcoming events to announce.

Chair Ganster introduced the first public comments speaker, Caitlin Trimble, a resident of the San Diego-Tijuana crossborder community, who spoke about her experience applying to the Secure Electronic Network for Travelers Rapid Inspection (SENTRI) program. The first time Ms. Trimble applied for SENTRI she was denied for an unspecified reason and subsequently submitted a Freedom of Information Act request in order to find out the reason for the denial. The response she received ten months later provided no indication of the motive for the denial. On

those grounds, she was able to request an appointment with a Supervisor. Although the Supervisor confirmed the reason for the denial was related to a family member's application from many years prior, and encouraged her to reapply again, she was once again denied for unspecified reasons. Ms. Trimble expressed her frustration with the experience, and noted that the inefficiency of border crossings and the long wait times inhibit the potential prosperity of the border region. Chair Ganster encouraged Ms. Trimble to stay until after the meeting to have the opportunity to speak informally with members of the Committee.

Mario Lopez, City of San Diego, shared two articles from the "U.S. Mayor's Association" publication that reported on the High-Level Economic Dialogue and points to the relationships between mayors, cities, and municipalities along the border as key to the North American partnership.

#### **CONSENT (4)**

##### **+4. UPCOMING EVENTS**

Chair Ganster invited attendees to review the upcoming events that were included in the agenda packet.

Action: This item was presented for information. No action was taken on this item.

#### **REPORTS (5 through 7)**

##### **+5. ENVIRONMENTAL PROJECTS ALONG THE CALIFORNIA AND ARIZONA U.S.-MEXICO BORDER: FUNDING FROM THE U.S. ENVIRONMENTAL PROTECTION AGENCY**

Chair Ganster introduced this informational item and invited Dave Fege, U.S. Environmental Protection Agency (EPA), to discuss it. Mr. Fege discussed how the U.S. EPA has awarded grants to fund several environmental projects along the California-Arizona U.S.-Mexico border as part of the Border 2020 Program. The EPA issued seven grants, including one to support the restoration of the Upper Tijuana River Corridor and another to estimate air pollution from idling vehicles crossing northbound at the Calexico West and East Ports of Entry (POEs). The goal of the air pollution project is to analyze air quality impacts as well as establish a model for determining and estimating those impacts due to changes at the POEs (e.g., quicker inspections, changes in operations, etc.).

Action: This item was presented for information. No action was taken on this item.

Chair Ganster acknowledged and thanked the EPA for its continual implementation of the small grants program regardless of the severe budget cuts that have been implemented in the public sector.

##### **+6. REPORT FROM FUNDACIÓN INTERNACIONAL DE LA COMUNIDAD, A.C. (Cecilia Luken, Fundación Internacional de la Comunidad)**

Chair Ganster introduced Cecilia Luken, Fundación Internacional de la Comunidad (FIC) to present the report. Ms. Luken began by sharing the mission and vision of FIC. She outlined how FIC is a unique foundation in its scope in that it assists in building communities and strengthening civil society in Baja California by promoting philanthropy in the region. She explained how FIC identifies

social needs and links them with donors from government and private entities, international foundations, and businesses. The organization then reports back to the donors on the impacts their investment had on the community, including transparent financial reports on the uses of the funds. By channeling resources, running programs, and aligning with organizations, community groups, private initiatives, businesses and governments, FIC helps strengthen communities by framing philanthropy as a social responsibility and contribution to society. Ms. Luken concluded by thanking everyone for their time and pointed to a report she brought for review.

Chair Ganster asked about FIC's relationship with the International Community Foundation and if money donated in the United States could be used for causes in Mexico, and vice-versa; Ms. Luken confirmed that that is indeed the case. Yolanda Walther-Meade, Fundación Internacional de la Comunidad, noted that FIC was the first agency to offer tax credits to donors in Mexico for donations made to organizations in the United States, similar to donors in the United States being able to obtain tax credits for donations made, regardless of which country the donation is made to. Chair Ganster stressed that granting tax credits on either side of the border is an important precedent moving forward because it eliminates the physical barrier of the border as a deterrent to philanthropy, thus allowing resources to be used more efficiently throughout the region.

Consul General Remedios Gómez Arnau, Consulado General de Mexico en San Diego, asked which programs FIC is currently involved in funding. Ms. Luken said educational scholarships are something FIC is currently administering. Ms. Walther-Meade noted that FIC has also received a large amount of funding for the Borders Partnership, a coalition of organizations on both sides of the border focused on public health issues. Ms. Luken also expressed how FIC is involved in institutional strengthening by diagnosing organizations' needs and helping them access resources and funds to further their mission and goals. For example, FIC helps organizations find new, young employees, who otherwise would be unemployed and connects them with employers (e.g., maquiladoras).

Chair Ganster thanked Ms. Luken and noted that the Committee had achieved quorum, and thus moved back to Item No. 2 to approve the summary notes for the November 5, 2013, meeting.

**+7. PROPOSED THEME AND DATE OF THE 2014 SANDAG ANNUAL BINATIONAL EVENT**  
(Chair Paul Ganster)

Chair Ganster began the discussion by outlining last year's annual binational event, held on June 4, 2013, entitled: "Moving the Border Forward: Competitiveness and Sustainability." He stated that the event was focused on the 20th Anniversary of the signing of the North American Free Trade Agreement (NAFTA) and the 30th Anniversary of the signing of the "La Paz Treaty." Furthermore, Chair Ganster noted that the event last year included speakers that gave insight from an international regional perspective. He also spoke about the three recommendations approved by the Board of Directors that resulted from the seminar. Chair Ganster mentioned that staff is exploring opportunities for implementation of these recommendations in conjunction with the preparation of the FY 2015 budget. In addition, he stated that the recommendations were also presented to the U.S.-Mexico High-Level Economic Dialogue, which is a platform the administrations of Presidents Obama and Peña Nieto established to promote regional competitiveness and connectivity, foster economic growth and productivity, and partner for regional and global leadership.

Chair Ganster then asked the committee for its input on the organization of this year's binational event, which is tentatively scheduled for June 3, 2014. He informed the committee that the theme staff identified for the seminar is border crossing wait times and elevating the issue to become a local, state, and national priority. Héctor Vanegas, SANDAG, said that if the committee agrees to proceed with the stated theme, staff will continue with preparations for the event accordingly. Mr. Vanegas suggested that the committee establish a Task Force similar to last year to provide additional detailed input. In addition, he mentioned that there will be a report presentation at the Joint Meeting on March 28, 2014, pertaining to this subject.

Mario Lopez, City of San Diego, agreed with the topic of border wait times as the topic of this year's binational event and volunteered to be a Task Force member. He recommended getting in contact with James Clark, Executive Director of the Smart Border Coalition to see if the organization is interested in participating in the conference. Nathan Owens, The San Diego Dialogue, volunteered to be a Task Force member, and asked about the committee's ability to bring staff to the event from non-local government representatives. Chair Ganster commented that non-local staff representatives have attended previous events; last year, staffers from the offices of Senators Boxer and Feinstein were present. The committee then discussed the best way to encourage the attendance of non-local government representatives to the event. Mr. Owens suggested inviting speakers from other border regions to share their experiences considering that border crossing wait times is border-wide issue. Chair Ganster agreed and noted how wait times at both the northern and southern U.S. borders are dividing communities and impeding economic and social interaction.

**+8. INTELLIGENT TRANSPORTATION SYSTEM CONCEPT OF OPERATIONS FOR OTAY MESA EAST PORT OF ENTRY (Mario Orso, Caltrans District 11; and Christina Casgar, SANDAG)**

Chair Ganster introduced the presenters, Mario Orso, Caltrans, and Christina Casgar, SANDAG. Mario Orso began by thanking SANDAG for the work it does in assisting with the implementation of border projects and in disseminating information about border infrastructure projects. Mr. Orso continued with a brief overview of the Otay Mesa East (OME) Project and the four phases of construction: Phase I, which is currently underway and includes construction of half of the State Route 11 (SR 11) highway; Phase II, which includes the Commercial Vehicle Enforcement Facility; Phase III which includes the Port of Entry (POE); and Phase IV, which includes the connectors between Interstate 905/SR 11 and SR 125. Mr. Orso noted that Caltrans is submitting funding requests for the Phase IV connector by summer 2014, and construction is scheduled to begin in December 2014. Mr. Orso highlighted two project milestones to date, including: passage of Senate Bill 1486 which gave SANDAG the authority to toll SR 11 and designates it as the toll-authority; and the completion of the environmental review process. Mr. Orso then introduced the concepts for the Intelligent Transportation System (ITS), which is an effort to study toll collecting, traffic management and information relaying, and to measure border wait-times.

Ms. Casgar described the development of the ITS technology, which is an essential element to creating a "smart border" that includes 21st century design and technology, including a system to better inform drivers and commuters at the border. Ms. Casgar reiterated the importance of collaboration and finding a nexus of interest for policy collaboration in order to create a truly smart border that provides information sharing, security for crossers. She then introduced the various partners present who are involved in the project.



Samuel Johnson, SANDAG, introduced the Concept of Operations (ConOps). He briefly described how the ConOps is a de facto contract between the agencies and stakeholders to establish consensus and joint commitment to execute the project collaboratively. Mr. Johnson noted that the draft ConOps has four approaches: 1) Follow a systems engineering process, which ensures a structured approach; 2) Create a conceptual design layout for the POE to ensure efficient mobility; 3) Support federal partner agency objectives of securing the border, and facilitating the flow of people, goods and services; and 4) Leverage existing resources, maximize investments and minimize costs. Mr. Johnson reiterated the importance of using a systems engineering process to formulate and define the needs of the port to ensure that a sufficient system is installed with the correct amenities and technology. Mr. Johnson stated that the ConOps is the most difficult phase of the project because it requires an understanding of existing and future operations, and consensus from the stakeholders on how to best move forward.

Mr. Orso added how developing a binational informational technology system for traffic management is a new concept, which only adds to the complexity of the project. He expressed the importance of creating a system that is compatible in both the United States and Mexico, and for this reason, Mexican partner agencies will review and agree upon all of the project documents, including the ConOps, in order for the project to move forward.

Mr. Johnson then highlighted the design concept of the project and the layout of the lanes as an example of a conceptual layout vision. He continued to give an overview on the key assumptions in the ConOps that inform the vision for how the system operates.

Don Murphy, IBI Group, began by explaining the idea of user scenarios to help people visualize the functions of the port. He expressed how the technical engineering staff created four different types of user scenarios. For the purposes of this meeting, he shared a PowerPoint presentation demonstrating a northbound commercial vehicles scenario. Mr. Orso explained that in an effort to safeguard the information, the technology that will be used to share data and communicate between agencies will be a “cyber-cloud” system instead of being hard-wired.

Mr. Orso expressed that border crossing wait times are an important performance measure which can help inform officials on how to best serve border users. Mr. Johnson continued to explain some of the early efforts to use technology to measure travel and wait times, particularly a pilot program that works with the Safe Service Advisory for Freeway Emergencies, commonly known as ‘call boxes’. The project would incorporate Bluetooth technology into the call boxes and thereby monitor travel times. Mr. Johnson noted how they have deployed and are currently testing the technology at freeways near the border, such as I-5, in an effort to collect information and explore the technology. If successful, the project team will make an effort to expand the concept into Mexico to gain a complete picture of the user’s trip and travel times through the port. Mr. Johnson noted the pilot program on the U.S. side is low-cost and can be completed quickly in order to share the information and results.

Ms. Casgar asked Mr. Johnson to explain how the Bluetooth technology of the pilot program will be read and translated in order to give accurate wait-time information. Mr. Johnson answered by briefly outlining how Bluetooth technology devices work and communicate. He explained the “network identifier” technology in Bluetooth and how that will assist in knowing wait times. Mario Orso noted that since the ‘call box’ infrastructure already exists, installing the Bluetooth

attachment technology comes at a fraction of the cost compared to other forms of technology that do similar logging.

Paola Avila, San Diego Regional Chamber of Commerce, asked how the pilot program would be implemented in Mexico since the call box infrastructure does not exist, and wondered how the team would go about logging travel times there. Mr. Orso said that they will investigate options for the Mexican side and work with partners to examine their inventory and determine which method is best to study travel times. He noted that input from COBRO members will be essential for this process.

+9      ARQUINE'S "THRESHOLD OF THE AMERICAS" INTERNATIONAL ARCHITECTURE COMPETITION (Rodolfo Argote, Instituto Metropolitano de Planeación de Tijuana)

Rodolfo Argote, Instituto Metropolitano de Planeación de Tijuana (IMPLAN), began by thanking the committee for their time. Mr. Argote spoke about the Arquine Architecture competition being held in Tijuana this year. He informed the group that the competition is held annually in different cities in an effort to promote civic pride and engagement. Mr. Argote noted that so far, 400 architects have signed up for the competition. He continued by outlining some of the issues in Tijuana that the competition has chosen to focus on and described some of the preliminary development concepts and ideas. Mr. Argote then directed the group to a hand-out which described the competition in more detail.

Chair Ganster expressed his appreciation for creative endeavors in the region and asked Mr. Argote to follow-up with the committee on the competition results.

Mario Lopez, City of San Diego, asked about if the winning projects were going to be carried out to fruition or whether they were only conceptual works. Mr. Argote replied that the competition is only for conceptual projects, but the winning designs will be presented to interested parties in an effort to bring them to reality. Mr. Argote noted that since the competition is a well-known, international effort, it will be easier to gain the interest and commitment of development agencies in executing the winning concepts.

10.      NEXT MEETING DATE AND LOCATION

Chair Ganster thanked the group for its time and announced that a joint meeting of COBRO, the Borders Committee, and the municipalities and State of Baja California would take place on March 28, 2014, at SANDAG.

**San Diego Association of Governments**  
**COMMITTEE ON BINATIONAL REGIONAL OPPORTUNITIES**

September 2, 2014

AGENDA ITEM NO.: **2b**

**Action Requested: APPROVE**

MINUTES OF THE MAY 6, 2014, MEETING

File Number 3400200

**1. WELCOME AND INTRODUCTIONS**

The May 6, 2014, Committee on Binational Regional Opportunities (COBRO) meeting, was called to order by Chair Paul Ganster, Institute for Regional Studies of the Californias, San Diego State University (SDSU) at 3 p.m. Chair Ganster introduced a new COBRO member, Alejandra Gavaldón, the new Binational Affairs Director for the San Diego Mayor Kevin Faulconer. Mrs. Gavaldón briefly introduced herself and expressed her excitement to begin working with COBRO and its members.

Members present were: Chair Paul Ganster, Institute for Regional Studies of the Californias at SDSU; Juan Carlos Rivas, Consulate General of Mexico in San Diego; Jason Vorderstrasse, Consulate General of the United States in Tijuana; Efrain Ibarra, South County Economic Development Council; Arturo González, City of Tijuana Binational Affairs Office; Alejandra Gavaldón, City of San Diego; Justine Kozo and April Fernández, County of San Diego; Andy Hall, City of Imperial Beach; Dennis La Salle, Consejo de Desarrollo Económico de Tijuana; Paola Avila, San Diego Regional Chamber of Commerce; Christina Luhn, San Diego Regional Economic Development Corporation; Jason M-B Wells, San Ysidro Chamber of Commerce; Cecilia Luken, Fundación Internacional de la Comunidad, A.C.; and Viviana Ibañez, Otay Mesa Chamber of Commerce.

SANDAG staff members present were: Héctor Vanegas, Tayah Wheeland, Chris Kluth, Elias Sanz, and Ozzy Arce.

**+2. APPROVAL OF MEETING MINUTES**

A quorum was not achieved, therefore the minutes of the February 4, 2014, COBRO meeting were not approved.

**3. PUBLIC COMMENTS/COMMUNICATIONS AND MEMBER COMMENTS**

Chair Paul Ganster invited the members and the public to share any comments or upcoming events to announce.

James Clark, Smart Border Coalition, announced that the City of Chula Vista is forming a "Friends of Irapuato, Guanajuato" event on May 21, 2014, at 6 p.m., in Chula Vista.

Juan Carlos Rivas, Consulate General of Mexico in San Diego, announced two upcoming “Mainly Mozart” musical events the Consul General of Mexico in San Diego is supporting.

Efrain Ibarra, South County Economic Development Council (EDC), informed the members about a successful EDC Board meeting that included presentations by the Metropolitan Transit Service and the Pacific Imperial Railroad regarding the rehabilitation of the Desert Line of the San Diego & Arizona Eastern Railway. The EDC will facilitate follow-up meetings to continue the efforts on the railroad project. Mr. Ibarra also spoke about the effort to develop an economic hub around Brown Field Airport and noted that Héctor Vanegas, SANDAG, has been instrumental in making connections between stakeholders

Justine Kozo, San Diego County Office of Border Health, made an announcement about the work of the Border Health Consortium of the Californias and about its next meeting. She briefly outlined some of the goals of the Consortium and the topics being discussed at future meetings.

Paola Avila, San Diego Regional Chamber of Commerce, made an announcement regarding the annual trade show event MexPort. She noted that many companies are looking to relocate to the San Diego-Tijuana region, so there will be new faces at the trade show. She also announced an event taking place at the Southwestern College facility in Otay Mesa that is being organized in conjunction with South County EDC and will focus on updates on State Route 11. Ms. Avila also announced that the Chamber is hosting its Sacramento Delegation and will meet with the new California Assembly Speaker Toni Atkins, as well as the incoming Pro Temp Kevin de Leon, to establish new relationships. In addition, Mrs. Avila announced a meeting the Chamber is hosting on international trade at which the Vice President of International Policy at the U.S. Chamber of Commerce will be present to discuss trade agreement negotiations.

Alejandra Gavaldon, Director of Binational Affairs with the Office of San Diego Mayor Kevin Faulconer, introduced herself and briefly outlined some of goals the incoming San Diego Mayor has for the border region and economic development in general. She stated that she wants to get to know the people working towards advancing the goals of the border region, and wants to ensure that if the City or the Mayor can play a role in helping those efforts, they want to make themselves available to help.

Dennis La Salle, Consejo de Desarrollo Económico de Tijuana, announced a meeting the organization had with Mayor Kevin Faulconer regarding binational infrastructure, border crossings, the binational railroad and other topics related to the border region.

## **CONSENT**

### **+4. UPCOMING EVENTS**

Chair Ganster invited attendees to review upcoming events that were included in the agenda packet.

Action: This item was presented for information. No action was taken on this item.

## REPORTS

### +5. BINATIONAL PLANNING CONTACTS GUIDE UPDATE (Tayah Wheeland, SANDAG)

Chair Ganster asked Tayah Wheeland, SANDAG, to discuss the updated Binational Planning Contacts Guide.

Mrs. Wheeland explained the purpose of the Binational Planning Contacts Guide as a reference resource that includes local, state, and national governmental and non-governmental entities related to border region planning projects, and noted that the Guide is posted on the Borders page of the SANDAG website.

Viviana Ibañez, Otay Mesa Chamber of Commerce, asked whether they could make additions to the contact guide if there are other pertinent organizations. Mrs. Wheeland confirmed that suggestions for additional contacts to add to the Binational Planning Contacts Guide would be welcome.

### +6. UPDATE ON THE 2014 BINATIONAL SEMINAR (Tayah Wheeland, SANDAG)

Mrs. Wheeland announced that the 2014 Binational Seminar event will be held on Tuesday, June 3, 2014, at the Southwestern College Higher Education Center located in Otay Mesa. She noted that there is a "Save-the-Date" flier included in the meeting agenda and stated that the theme of this year's seminar is "Efficient Border: A Globally Competitive Region".

### +7. 2014 SAN DIEGO BIKE TO WORK DAY AND TIJUANEANDO EN BICI (Carmen Romo, Tijuana Calidad De Vida)

Chair Paul Ganster introduced Carmen Romo, Tijuana Calidad de Vida, as well as Daniel Gómez Patiño and Jesús Antonio Zazueta Munguía of Alianza por el Ciclismo, who would make the presentation for this item. Chair Ganster noted the importance of the Bike to Work Day event, and its counterpart event in Tijuana, and the overall grassroots cyclist movement in Tijuana as essential to issues of mobility and public and environmental health.

Carmen Romo spoke on the history of Bike to Work Day and how the City of Tijuana was invited by SANDAG to participate in the event in 2011. Ms. Romo said because of SANDAG's invitation, many bicyclists in Tijuana were excited about participating in this binational event and excited about creating new cycling partnerships. Ms. Romo briefly discussed logistics for the event, specifically the event's binational route and the border crossing portion. She then discussed how more recently, government officials on both sides of the border have been paying more attention to active transportation in the border region and have made progress to advance the infrastructure at the port of entry (POE) for easier access and mobility.

Daniel Watman, Border Encuentro, briefly let the audience members know of a binational meet-up location for the Tijuaneando en Bici event at the International Friendship Garden where a workshop on bicycle maintenance will be held to educate the public.

Daniel Gómez Patiño, Alianza por el Ciclismo y una Ciudad más Humana, spoke on the importance of bicycling and the need for an efficient urban mobility system that takes all types of mobility systems, both motorized and non-motorized, into consideration. Mr. Gómez Patiño noted that

educating the public on the benefits of active transportation is a great way to start encouraging people to use alternate modes of transportation. He stated that with an educational campaign, people will begin to realize the importance of a transportation infrastructure system at the border that allows people to move around not just by foot or by a motorized vehicle, but also by bicycle.

Ms. Romo then shared details on some additional events that have taken place in Tijuana and Baja California in order to promote active mobility. She noted that many groups in Tijuana and Baja California are coming together, joining efforts, and drafting joint proposals to make a stronger argument for active transportation options.

Mr. Zazueta Munguía from the Alianza por el Ciclismo y una Ciudad más Humana, invited members of the audience to a 40 mile bicycle ride that will be part of the City of Chula Vista's International Friendship Games on June 7, 2014. The bike ride, which includes a 20 mile route through the City of Tijuana, showcases many of the artistic and cultural centers of the city and lets people know that the city is friendly and is actively working to improve its bicycle transportation infrastructure. The border crossing portion of the event demonstrates to officials at the border that bicycling across the POE is feasible and can be processed efficiently.

Chair Ganster thanked the presenters for their announcements and time, and applauded the organization's bicycle mobility goals and noted how other border regions in Europe and Japan have binational infrastructure for bicycling and so the San Diego-Tijuana border region should as well. Chair Ganster also noted that working with the authorities to make mobility more efficient at the border, specifically bicycle mobility, is important and should be included in the POE development plans moving forward.

#### +8. REGIONAL BICYCLE PLAN EARLY ACTION PROGRAM (Chris Kluth, SANDAG)

Chair Paul Ganster introduced the next presenter, Chris Kluth, SANDAG, to speak on the Regional Bicycle Plan Early Action Program.

Mr. Kluth began by outlining the history and funding structure of the Regional Bicycle Plan. He explained that the Early Action Program was approved by the SANDAG Board of Directors in fall, 2013, and includes the implementation of 42 of the highest priority projects in the Regional Bicycle Plan. The 42 projects include a total of 77 miles of bike paths that will be constructed over the next ten years. He noted that the projects take safety improvements for all users of the street, including motorized and non-motorized activity, into account. Mr. Kluth presented slides showing examples of different street designs as case studies for what could be done to implement bikeways. Mr. Kluth explained that a guiding principle behind the project plans is to focus not only on daily commuters, but also people that can use a bicycle locally for shorter trips less frequently. Mr. Kluth noted that the project is an opportunity to provide benefits to the community, regardless of whether residents ride a bicycle or not because there are other street-scape, safety and pedestrian improvements included in the project plan that will benefit all users of the street. He noted that bikeway projects also promote smart street designs that facilitate economic development opportunities. Mr. Kluth then showed the Committee members a preliminary planned route to connect the San Ysidro border area to the Bayshore Bikeway, which is a project included in the Early Action Program. The planning process for this project will begin in about a year, and will solicit community input to ensure the route will serve the community appropriately. Mr. Kluth thanked Hector Vanegas for

inviting him to present and stated he would return to update the Committee on the project's progress at future meetings.

Jason M-B Wells, San Ysidro Chamber of Commerce, noted that the Chamber is working with Customs and Border Protection to implement a lane at the planned Virginia Avenue pedestrian facilities that will allow cyclists to cross the border more easily. Mr. Wells stated that it be it might be best to route the bicycle path west of Interstate 5 (I-5) for logistical reasons, and to take advantage of and promote the underutilized scenic Tijuana River Estuary site at Dairy Mart and Camino de la Plaza. Mr. Wells added that for people coming from Tijuana and biking into San Diego, a better link to the Bayshore Bikeway would be a western route using Camino de la Plaza instead of snaking through neighborhood streets. Mr. Kluth thanked Mr. Wells for his suggestions and noted that his team is always looking for alternative plans and paths, and depending on the different opportunities and constraints, they will be taken into consideration.

Elizabeth Hensley Chaney, Alianza por el Ciclismo y una Ciudad más Humana, added that she believes a bicycle path connecting to the west of I-5 would be a good option, if it is connected to the Virginia Avenue facility, with a path behind the Plaza las Americas outlets and leading to Dairy Mart Road. Ms. Chaney noted that it is a route that is already well-frequented by cyclists coming from Tijuana.

Mr. Zazueta Munguía commented that in regards to the Virginia Avenue crossing, there is a need to incentivize bicycle use by prioritizing or promoting cycling. He noted that traffic at the San Ysidro POE would be reduced if people began bicycling on a greater scale, and stated that commercial sales would also increase with more mobility at the border.

Mr. Gómez noted that there are problems for cyclists crossing southbound into Tijuana via San Ysidro and hopes that there are plans to better facilitate motorized and non-motorized traffic at El Chaparral through Virginia Avenue.

+9. 2013 SAN DIEGO-BAJA CALIFORNIA BORDER CROSSING AND TRADE STATISTICS  
(Tayah Wheeland, SANDAG)

Tayah Wheeland, SANDAG, presented border crossing and trade statistics for the three existing POEs which connect San Diego to Baja California. She noted that the data is from the years 1998 to 2013 and is provided by the Department of Transportation's Research and Innovative Technology Administration. Mrs. Wheeland presented slides that included charts illustrating the crossing data for northbound vehicles, northbound individual crossings, and bilateral trade values for the region's POEs. She noted that this data is available on the SANDAG website for review. Mrs. Wheeland concluded by stating that although overall crossing numbers have declined in the last decade, trade values and pedestrian crossings are increasing, and with the ongoing construction projects at the San Ysidro POE, as well as the new capacity that will be added in the future by the Otay Mesa East POE and the Crossborder Facility that will connect San Diego to Tijuana's International Airport, hopefully border crossing wait times will be reduced, and crossing numbers will begin to increase.

Viviana Ibañez, Otay Mesa Chamber of Commerce, commented that the decline in truck crossings at Tecate could be in part because semi-trucks were prohibited along Highway 94, and thus, the Tecate brewing company used the Otay Mesa POE to deliver its product. Ms. Ibañez also asked if the

data spreadsheet could be shared. Mrs. Wheeland stated that she would be happy to share the report and the spreadsheet with the raw data.

Mr. Wells commented that from an economic development perspective, the regional story that the data tells would be more complete if border wait times were shown on the same graph as the trade data and border crossing numbers in a chart in order to demonstrate how they affect one other. He clarified that the border crossing wait times may have to be anecdotal since there is, as of yet, no scientific way to measure them.

In relation to Mr. Wells' comment, Mr. Vanegas commented that as part of the Traffic and Revenue Study for the Otay Mesa East/Mesa de Otay II POE project, many traffic simulations were created for the San Ysidro POE that will be available to share once the study has been vetted by the Mexican government. In addition, as part of the study, Bluetooth technology will be utilized to measure exact southbound wait times at the border.

Dennis La Salle, Consejo de Desarrollo Económico de Tijuana, noted that the Mexican Federal government has appropriated the federal funds needed to complete the Mexican side of the Otay Mesa East POE project and ready to move the project forward if the United States appropriates the funds needed to construct the U.S. side of the project.

Mr. Vanegas added that Mexico's National Infrastructure Plan not only includes funding for the Otay Mesa East POE, but other projects in the San Diego-Tijuana border region such as the Tijuana Airport and a Bus Rapid Transit line in Tijuana.

Jason M-B Wells asked if there were still plans moving forward to incorporate the light-rail in the City of Tijuana.

Mr. Vanegas said that staff is currently working on updating the Border Master Plan and the State of Baja California submitted a couple projects for consideration, including a passenger rail service in the Tijuana-Tecate area with connection to El Sauzal in Ensenada, but that those efforts are still in discussion.

#### 10. NEXT MEETING DATE AND LOCATION

Chair Ganster informed the group that the next meeting would take place on Tuesday, June 3, 2014, for the annual binational seminar taking place at the Southwestern College Higher Education Center in Otay Mesa, and reminded members to show up on time in order to get a seat.

Jason M-B Wells made a final announcement by inviting Committee members to a forum in San Ysidro on May 14, 2014, that will discuss the Virginia Avenue facility at the San Ysidro POE.

Chair Ganster thanked the members for their attendance and closed the meeting.



**San Diego Association of Governments**  
**COMMITTEE ON BINATIONAL REGIONAL OPPORTUNITIES**

September 2, 2014

AGENDA ITEM NO.: **4**

**Action Requested: INFORMATION**

**UPCOMING EVENTS**

File Number 3400200

**WHAT:** **La reforma educativa en Baja California: contexto, escenarios y propuestas de política educativa. Hacia un modelo educativo regional**

**El Colegio de la Frontera Norte**

**WHEN:** September 5, 2014

**WHERE:** Aula Magna Raúl Rangel

**MORE INFO:** <http://www.colef.mx/?evento=la-reforma-educativa-en-baja-california-contexto-escenarios-y-propuestas-de-politica-educativa-hacia-un-modelo-educativo-regional&lang=en>

**WHAT:** **San Diego Regional Chamber of Commerce Mission to Washington**  
**San Diego Regional Chamber of Commerce**

**WHEN:** September 7-10, 2014

**WHERE:** The Madison Hotel, Washington D.C.

**MORE INFO:** (619) 544-1370 or <http://sdchamber.org/events-and-programs/chamber-events.html?go=1409554800&eID=392&sDate=2014-09-07&eDate=2014-09-10>

**WHAT:** **Música e Imagen de México Concert**  
**Consulate General of Mexico in San Diego**

**WHEN:** September 9, 2014

**WHERE:** Copley Symphony Hall, San Diego

**MORE INFO:** RSVP by September 4, at [cgeneralsd@sre.gob.mx](mailto:cgeneralsd@sre.gob.mx)

**WHAT:** **10th Annual South County Elected Officials Reception**  
**South County Economic Development Council**

**WHEN:** September 18, 2014

**WHERE:** Pier 32 Marina: 3201 Marina Way, National City

**MORE INFO:** [http://media.wix.com/ugd/061260\\_3f113cd77ce94c4b9ff0b2f49a8eb764.pdf](http://media.wix.com/ugd/061260_3f113cd77ce94c4b9ff0b2f49a8eb764.pdf)

**WHAT:** **Tijuana River Action Month**

**WHEN:** September 20-October 11, 2014

**WHERE:** Various Locations in the River Valley

**MORE INFO:** <http://www.tjriveraction.net/>

**WHAT:** Annual International Tribute Gala  
**San Diego Regional Chamber of Commerce's Mexico Business Center**  
**WHEN:** October 2, 2014  
**WHERE:** Hotel del Coronado  
**MORE INFO:** (619) 544-1354 or <http://sdchamber.org/events-and-programs/chamber-events.html?go=1412146800&eID=415&sDate=2014-10-02&eDate=2014-10-02>

**WHAT:** 24th Annual Economic Summit  
**South County Economic Development Council**  
**WHEN:** October 10, 2014  
**WHERE:** San Diego Convention Center  
**MORE INFO:** <http://www.southcountyledc.com/!24th-annual-economic-summit/c1npq>

**WHAT:** Tijuana Innovadora 2014  
**Tijuana Innovadora**  
**WHEN:** October 16-26, 2014  
**WHERE:** Centro Cultural de Tijuana (CECUT)  
**MORE INFO:** <http://www.tijuanainnovadora.com/>

**WHAT:** North American Competitiveness and Innovation Conference (NACIC 2014)  
**San Diego Regional Chamber of Commerce**  
**WHEN:** October 27-30, 2014  
**WHERE:** Hilton Torrey Pines, La Jolla  
**MORE INFO:** (619) 544-1341 or <http://sdchamber.org/index.php?q=events-and-programs/chamber-events.html&go=1380610800>

Key Staff Contact: Hector Vanegas, (619) 699-1972, [hector.vanegas@sandag.org](mailto:hector.vanegas@sandag.org)

**San Diego Association of Governments**  
**COMMITTEE ON BINATIONAL REGIONAL OPPORTUNITIES**

September 2, 2014

AGENDA ITEM NO.: **5**

**Action Requested: INFORMATION**

COBRO CALENDAR OF MEETINGS FOR FISCAL YEAR 2015

File Number 3400200

The following meeting dates are proposed for the COBRO meetings in Fiscal Year 2015 (July 2014 – June 2015). Meetings will be held at SANDAG, 401 B Street, Suite 800, San Diego, from 3 to 4:30 p.m., unless noted otherwise.

- Tuesday, September 2, 2014
- Tuesday, November 4, 2014
- Tuesday, February 3, 2015
- Friday, March 27, 2015, 12:30 p.m. (Joint Meeting with the Borders Committee and the Municipalities and State of Baja California)
- Tuesday, April 7, 2015 (*Tentative*)
- Tuesday, June 2, 2015, TBD. (*Tentative: Annual Binational Event*)

Key Staff Contact: Hector Vanegas, (619) 699-1972, [hector.vanegas@sandag.org](mailto:hector.vanegas@sandag.org)

**San Diego Association of Governments**  
**COMMITTEE ON BINATIONAL REGIONAL OPPORTUNITIES**

September 2, 2014

AGENDA ITEM NO.: **6**

**Action Requested: INFORMATION**

OVERVIEW OF SELECT SAN DIEGO-BAJA CALIFORNIA  
BORDER REGION ISSUES

File Number 3400200

**Introduction**

The San Diego region's borders have traditionally been thought of as limited to the jurisdictional boundaries of San Diego County; however, over the years, our perceived borders have expanded. San Diego County increasingly has close ties to its neighboring counties, the Republic of Mexico, and the 17 tribal governments which are sovereign nations within our region. With the rise in the last several years in interregional and international commuting, goods movement and linked industries, the San Diego-Baja California region is not only an increasingly important and interdependent trade and commuting corridor, but it is also poised to become an important binational megaregion with a distinct global competitive advantage.

With a current combined border population of 4.8 million in San Diego County and the Tijuana, Tecate, Playas de Rosarito Metropolitan Zone of Baja California, and a projected combined population of almost 6.8 million by 2030<sup>1</sup>, our binational border region also faces a number of challenges. Among these challenges are the issues of long border crossing wait times hampering economic development, access to jobs and housing, water quality and supply, energy supply, air quality, habitat preservation, transportation mobility, and climate change. Today, stakeholders on both sides of the border are collaborating to address these challenges in our border region in order to ensure a prosperous future.

SANDAG's Binational Planning program addresses these important binational issues in the San Diego-Baja California region by calling on a wide array of experts to provide advice on important binational topics. The Committee for Binational Regional Opportunities (COBRO) serves as a working group to support the SANDAG Borders Committee and makes recommendations for actions by appropriate agencies. COBRO brings together representatives from cities, government agencies, businesses, academia, and other community organizations located on both sides of the U.S.-Mexico border and is the region's only government-sponsored public advisory committee addressing the binational community. In 2004, the Borders Committee identified critical planning areas around which to focus its collaborative efforts. The attached draft report provides a brief synopsis of updated information on four of those critical areas: jobs and housing accessibility, transportation, energy and water, and environment.

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<sup>1</sup> 2030 Population projections based on data from the California Department of Finance and Tijuana's Metropolitan Institute of Planning (Instituto Metropolitano de Planeación de Tijuana or IMPLAN in Spanish)

**Next Steps**

Staff will monitor the status of these issues and provide periodic updates as needed.

Attachment: 1. Overview of Select San Diego-Baja California Border Region Issues (Draft)

Key Staff Contact: Tayah Wheeland, (619) 699-1922, [tayah.wheeland@sandag.org](mailto:tayah.wheeland@sandag.org)

## OVERVIEW OF SELECT SAN DIEGO-BAJA CALIFORNIA BORDER REGION ISSUES

This draft report provides a synopsis of the following issues in the San Diego-Baja California border region: Access to Jobs and Housing, Transportation, Energy and Water Supply, and Environment. It is intended to serve as a reference for future points of discussion.

### Access to Jobs and Housing

The growth projected for San Diego region over the next 30 years is a function of economic expansion and job creation, a continued influx of people moving to the area, and natural population growth within the area. However, home construction in the San Diego region has not kept pace with population growth. Building permit issuance has fallen from nearly 20,000 units in 2003, to just over 5,000 units in 2011. While 138,500 new housing units were built in San Diego County between 1990 and 1999, and another 138,000 were built between 2000 and 2009, only about 2,700 were built between 2010 and 2012, most of which are apartment units, as opposed to for sale housing, thereby limiting the availability of housing choices in all price ranges.<sup>1</sup>

Consequently, housing prices have risen, making home ownership difficult for much of the population. The median house value in San Diego has grown 93.82 percent since 2000, while median household income has only grown by 28 percent.<sup>2</sup> As of the third quarter of 2013, only 27 percent of homes sold in San Diego County were affordable to a family earning the median annual income of \$60,330<sup>3</sup>. In addition, according to SANDAG's Regional Housing Needs Assessment for 2010-2020, the pace of residential building permits in San Diego County over the last five years is about half of what the region now needs each year in order to adequately supply housing for the growing population. As a result, many people who are employed in the region don't live here or have started moving to neighboring regions, including southwestern Riverside County, Imperial County, and Baja California, in search of homeownership.

While it is well known that many Mexican residents cross the border on a daily basis to work, recreate, shop, and attend U.S. schools, it is less well known that many Americans also reside in Mexico and cross the border daily for these same purposes, as well as a significant number of U.S. residents cross to Mexico because they own businesses or have family there. Based on a demographic estimate from the Northern Border College (*El Colegio de la Frontera Norte* or COLEF in Spanish) from a decade ago, 50,000 to 60,000 U.S. legal residents live in Tijuana alone. Between 2011 and 2013, an annual average of over 28 million U.S. citizens crossed the border from Mexico into the San Diego region through the San Ysidro and Otay Mesa ports of entry (POEs).<sup>4</sup> According to SANDAG's 2011 Crossborder Travel Behavior Survey of Baja California residents crossing into the United States through one of the three POEs in the San Diego region, 26 percent of respondents indicated the primary reason for crossing the border was for work. This binational housing and job market relationship places daily pressure upon the border POEs and its related infrastructure is enormous; commute times can be long and unpredictable.

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<sup>1</sup> 2000-2012 U.S. Census Bureau American Community Survey

<sup>2</sup> Ibid.

<sup>3</sup> Based on U.S. Census Bureau, 2012 American Community Survey data on median earnings for full-time year-round workers in San Diego County

<sup>4</sup> Based on crossing data from U.S. Customs and Border Protection

Although the population growth rate for the northern coastal urban areas of Baja California has slowed down (it has dropped from 5.8 percent between 1990 and 1995 to 2 percent from 2005 to 2010), Tijuana's population is expected to reach over 2 million by the year 2030, a 33 percent increase from its current population of over 1.5 million people.<sup>5</sup>

The housing deficit in Tijuana has been met by self-constructed houses for many decades. However, the current housing demand in that city is overwhelming existing capacity and this situation is causing sprawl and an overflow of self-constructed housing that sometimes unregulated, crop up along the eastern edges of the city. This type of growth can be challenging to human health and affect open space preservation, public safety, and myriad other issues. Given the need to expedite the process of building new housing units, the mayor of Tijuana and the National Chamber of Housing Promotion (*Cámara Nacional de la Industria de Desarrollo y Promoción de Vivienda* or CANADEVI in Spanish) agreed in early 2014 to promote the modernization of outdated municipal building regulations, which inhibit new construction. The agreement will be ratified by the Committee on Housing Development in order to expedite the government's goal to build 12,000 new homes in Tijuana in 2014. This is parallel to new federal policies implemented by the new Secretariat of Agrarian, Territorial and Housing Development (*Secretaría de Desarrollo Agrario, Territorial y Urbano* or SEDATU in Spanish) that are intended to reorganize urban development into more dense and compacted areas.

Housing costs have a significant impact on daily migration. The average market value of a single-family home in Tijuana in 2013 was \$1,089,286 pesos or roughly \$83,200 U.S. dollars.<sup>6</sup> Compare this to the median priced home in San Diego in 2013 of \$485,000<sup>7</sup>, and it becomes obvious why many would choose to live south of the border and commute to their jobs in the United States. This disparity is a factor of the overall national economy of each country and will not likely be resolved in the near future. Therefore we must address both the issues of San Diegans migrating southward for affordable housing and the northward influx of Mexicans heading to their jobs north of the border.

## **Transportation**

Regional transportation facilities and services connect to larger transportation systems beyond the San Diego region's boundaries. These connections have become more important with the rise in both interregional and international commuting and goods movement in the last several years. San Diego and the rest of Southern California are home to major U.S.-Mexico trade corridors where goods pass through the region on their way to markets throughout the country and the world. Our transportation systems are also greatly affected by interregional commuting patterns and general travel.

As growth continues in this region and the surrounding areas, maintaining major transportation systems will be an even greater challenge. To address these issues, SANDAG periodically develops and updates a Regional Transportation Plan, which outlines a detailed blueprint for addressing the San Diego region's travel needs through the year 2050, including highway improvements, transit, bikeways and pedestrian paths, all working together to increase our mobility.

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<sup>5</sup>Plan Municipal de Desarrollo, Ayuntamiento de Tijuana, 2011-2013, and Consejo Nacional de Población (Proyecciones de la población de los municipios de México 2010-2030)

<sup>6</sup>Sociedad Hipotecaria Federal, S.N.C., (SHF), del Banco de Desarrollo de México

<sup>7</sup>California Association of Realtors Housing Affordability Index (CAR)

The main formal mechanism through which binational transportation planning is coordinated by California and Baja California is the California-Baja California Border Master Plan (BMP). The California-Baja California BMP is a bilateral effort to collaborate on the planning and delivery of projects at land port of entries and the transportation infrastructure serving them. Its “area of influence” includes San Diego and Imperial counties in California, and the municipalities of Tijuana, Tecate, Playas de Rosarito, parts of Mexicali, and the urban area of Ensenada in Baja California. The California Department of Transportation (Caltrans), in partnership with the Secretariat of Infrastructure and Urban Development of Baja California (*Secretaría de Infraestructura y Desarrollo Urbano del Estado de Baja California* or SIDUE in Spanish) and the U.S./Mexico Joint Working Committee (JWC), retained the SANDAG Service Bureau to assist in the development of this Plan, which was recently updated. Within this framework, short-, mid-, and long-term POE and transportation projects are analyzed and prioritized.

There are six existing international land POEs in our region connecting Baja California, Mexico to California through San Diego and Imperial counties, while a seventh is planned at Otay Mesa East and a crossborder passenger connection to the Tijuana International Airport has begun construction, as shown in Figure 1. These international POEs accommodate millions of crossings every year, including pedestrians, personal vehicles, buses, and trucks and trains carrying cargo. To accommodate the dynamic border transportation system and keep pace with population and trade growth and increasing binational commuting, projects are underway to improve access to border crossings and improve their connectivity with transit and active transportation networks, expand border crossing infrastructure, improve freight rail service, increase the efficiency of commercial vehicle crossings, and continue to expand programs such as the Secure Electronic Network for Travelers Rapid Inspection (SENTRI), Global Entry, Customs-Trade Partnership Against Terrorism (C-TPAT), and Free and Secure Trade (FAST) that expedite border crossings for pre-screened participants.

**FIGURE 1—EXISTING AND PLANNED NEW PORTS OF ENTRY**





## Ports of Entry and Related Infrastructure

In 2013, more than 44.7 million individuals and 19 million vehicles crossed the border northbound into our region from Mexico to the United States through the six POEs in San Diego and Imperial counties; that breaks down to approximately 122,500 individuals and 52,700 vehicles crossing northbound every day.<sup>8</sup> The physical infrastructure and administrative resources at existing border POEs are already strained. Anticipated increases in population growth and international trade will place even greater pressures on the existing infrastructure.

### San Ysidro POE

The U.S. General Services Administration (GSA) is executing a major expansion and reconfiguration project to improve the San Ysidro POE, which is the busiest POE in the region, and one of the busiest in the world. The San Ysidro POE handled an estimated 56 million bidirectional crossings in 2013.<sup>9</sup> As demonstrated in Figure 2, the reconfiguration project calls for north and southbound capacity improvements for vehicles and pedestrians, including primary booths, a secondary inspection area, administration space, and improved pedestrian processing facilities on both the western and eastern ends of the port, as well as access to a new transit facility on Virginia Avenue. Improvements to southbound capacity also are part of the project. When completed, the POE would increase its capacity from 24 to 34 northbound lanes. The number of northbound pedestrian lanes will increase from 13 to 22 lanes. In addition, there is a temporary connection of the I-5 with the El Chaparral POE on the Mexican side. When the realignment of I-5 is complete, it will terminate at Camino de la Plaza to provide direct access to Virginia Avenue on the U.S. side, and will increase the number of southbound vehicle lanes from 6 to 12. Once the expansion project is complete, the increased capacity will hopefully reduce the long border crossing delays at this POE.

**FIGURE 2—SAN YSIDRO-PUERTA MÉXICO-EL CHAPARRAL EXPANSION PROJECT**



<sup>8</sup>U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics

<sup>9</sup>Ibid.

## Otay Mesa POE

Similar to the pressures on the busy San Ysidro POE, the number of commercial crossings at the Otay Mesa POE is staggering. In 2013, 769,886 trucks passed northbound through the port, which is historically the highest level of commercial crossings.<sup>10</sup> The SANDAG 2050 Comprehensive Freight Gateway Study projects that the nearly two million trucks that crossed the California-Mexico border in 2007 will increase to almost five million in 2050.

The increase in commercial truck traffic since 1995 is related to the implementation of the North American Free Trade Agreement (NAFTA), which has spurred substantial growth in trade between California and Mexico. Mexico has become California's number one export market, purchasing nearly \$24 billion of California exports in 2013, a 241 percent increase since 1995.<sup>11</sup> Similarly, imports from Mexico to California have increased dramatically, more than doubling between 1995 and 2002, and almost tripling between 1995 and 2013. On a regional level, two thirds of Baja California's exports are destined for the United States. In turn, San Diego is among the top ten U.S. exporters to Mexico. In 2013, over \$36 billion in goods moved between the United States and Mexico through the Otay Mesa and Tecate POEs alone, which is more than a 400 percent increase since the implementation of NAFTA.<sup>12</sup> The vast majority of total trade between California and Mexico is transported by trucks, thus placing an enormous strain not only on the commercial POEs, but also on local road and highway networks.

Local governments and authorities responsible for transportation infrastructure have begun to plan or construct new projects to link the ports of entry infrastructure with local transportation systems and trade corridors in order to facilitate continued growth in binational trade.

In April 2009, the Department of Homeland Security (DHS) was awarded approximately \$21.3 million of American Recovery and Reinvestment Act (ARRA) funds for some initial Otay Mesa POE modernization projects. These funds were used to cover the cost of land acquisition and a portion of the design for an expansion project, which would make improvements to both commercial and non-commercial portions of the existing port. In July 2009, the U.S. GSA awarded the Architecture and Engineering design contract for the Otay Mesa POE Modernization project. This began a design phase that reached 60 percent completion before funds were depleted. Completion of the Port's design, an Environmental Impact Statement for the project, and construction are subject to the availability of funding that has not yet been authorized by Congress. The upgrades are expected to cost \$120 million.

## Tecate POE

The Tecate Land POE is the smallest in San Diego County and is a multi-modal inspection facility that provides service for pedestrians, passenger vehicles, buses, commercial vehicles, and freight rail (the rail line crosses at Campo, located east of the POE). Two rail projects, one on either side of the border, have been proposed to modernize and double-stack the crossborder rail line, which would increase the market potential of this route for international and interstate movement of goods (additional details can be found in the Multimodal Issues section). Mexico also plans to expand the current cargo POE, which would expand the cargo inspection facilities at the Tecate POE, as well as

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<sup>10</sup>U.S. Department of Transportation Research and innovative Technology Administration Bureau of Transportation Statistics

<sup>11</sup>Ibid.

<sup>12</sup>Foreign Trade Division, Census Bureau, U.S. Department of Commerce

a new road to facilitate traffic to and from the port. The POE is currently operational for pedestrian and passenger vehicle inspections on the U.S. side of the border for 18 hours a day, from 5 a.m. to 11 p.m. There are efforts underway to adjust or expand the hours of operation of passenger inspections at this POE in order to facilitate increased travel.

In 2000, SANDAG conducted a feasibility study for a new border crossing that would link Jacumba in San Diego County and Jacumé in the Municipality of Tecate, Mexico. This study recommended that California and Baja California government agencies continue planning and coordination efforts to identify and reserve right-of-way for inspection facilities and connecting roadways to allow for the development of a future POE. The Secretariat of Infrastructure and Urban Development (SIDUE), Baja California's state planning agency, also has considered this location for a future POE in its long-range planning work to improve access for passenger vehicles and trucks that travel between Baja California and locations east of San Diego.

#### Future Otay Mesa East POE

The development of a new POE, Otay Mesa East (Mesa de Otay II on the Mexican side), is underway and will provide an alternate entry for vehicles and commercial traffic approximately two miles east of the existing Otay Mesa commercial crossing. Otay Mesa East will be linked to State Routes (SR) 905 and 125 through the construction of SR 11. This port will also connect to the Tijuana–Rosarito corridor, a highway in Baja California that connects the coastal area of Rosarito to the southeast of the Otay Mesa POE, as well as to the Tijuana-Tecate toll road. SR 11 and the POE are anticipated to be open to traffic in late 2017 (see Figure 1).

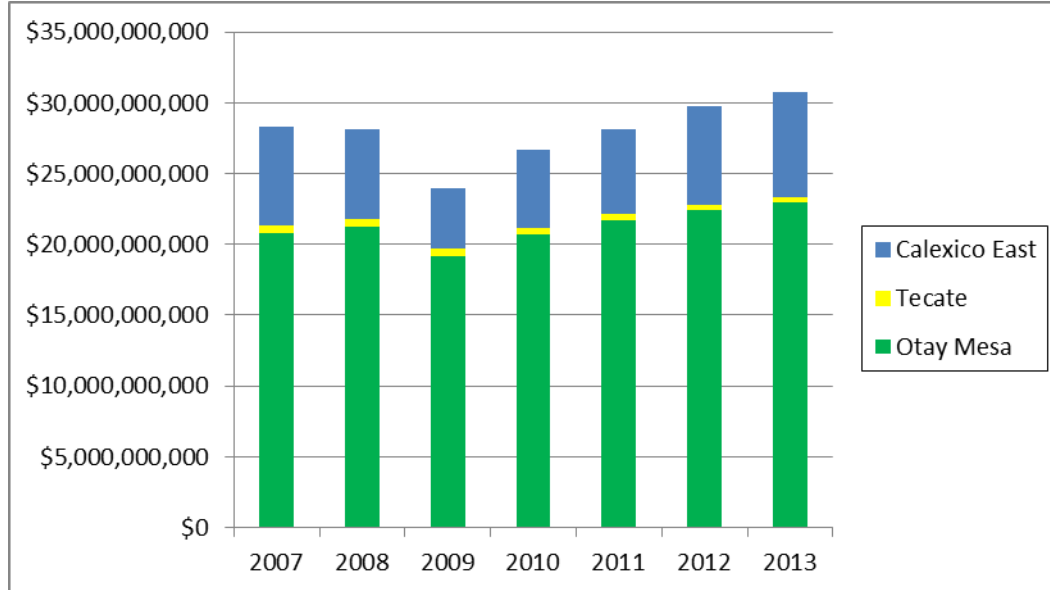
#### Trade Corridors

Improvements to our regional transportation infrastructure will strengthen trade corridors in the region. In 2013, more than one million trucks crossed northbound at the California-Baja California border, carrying more than \$30 billion in freight imports, as shown in Figure 3. A significant portion of freight that enters the California POEs from Mexico is destined for outside of the region; just over 10 percent of goods that enter San Diego County stay in the county, while the majority are headed for other counties in California, as well as other nearby border states, and even to states as far east as New York. Regarding goods that enter Imperial County, only about 1 percent stays there, while the rest is transported to other parts of California, the Midwest, or the East Coast.<sup>13</sup>

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<sup>13</sup>SANDAG Comprehensive Freight Gateway Study, 2007

**FIGURE 3—VALUE OF U.S.-MEXICO NORTHBOUND TRUCK TRADE THROUGH CALIFORNIA-BAJA CALIFORNIA PORTS OF ENTRY**



Source: U.S. Department of Transportation, Bureau of Transportation Statistics, Transborder Surface Freight Data.

Given the nationwide benefits of maintaining these key market entry routes and improving infrastructure for trade that flows through San Diego from Mexico, we need support from the State of California and the rest of the nation in securing funding for trade corridor infrastructure in the international border zone. These corridors include I-5, I-805, I-15, and SR 125 as the primary north-south corridors, and SR 94 and I-8, and SR 905/Otay Mesa Road as the region's east-west corridors.

The southbound truck route through these corridors is just as significant, since trucks crossing into Mexico through the San Diego region supply many of the components or raw materials needed for the thriving advanced manufacturing industry along the border. The Maquiladora Industry Program was established in Mexico in the mid-1960s to create jobs demanded by the increasing border population and to bring the Mexican national production system to the international market. Northern Baja California has developed competitive commercial and manufacturing industries that are linked to companies on the U.S. side of the border in San Diego and Imperial Counties. This "in-bond" manufacturing industry takes advantage of complementary resources on both sides of the border in order to jointly produce goods, from automobiles and flat screen televisions, to medical instruments. Today, more than 900 maquiladoras in Baja California, 62 percent of which are located in Tijuana<sup>14</sup>, depend on local transportation systems to move supplies quickly and efficiently. Maintaining efficient transportation systems to facilitate this movement of goods throughout the region is critical to continued economic growth locally, and nationally.

<sup>14</sup>Mexico's National Institute of Statistics and Geography (*Instituto Nacional de Estadística, Geografía e Informática* or INEGI in Spanish)

## Multimodal Issues: Rail Freight, Maritime, and Airports

Significant opportunities for binational collaboration exist in the area of freight rail transportation along the California-Baja California border. The existing binational railroad, the San Diego & Arizona Eastern (SD&AE), runs southeast from San Diego into Tijuana and Tecate, and then into the Imperial Valley. The SD&AE links Tijuana and San Diego with the rest of the railroad networks in the eastern part of both countries. The “Desert Line” of the SD&AE runs from the international border between Tecate into Plaster City in the Imperial Valley where it joins the Union Pacific. The Desert Line was out of service from 1983 until 2004 when it was reopened. However, due to deteriorating conditions, the railroad ceased all revenue freight on the Desert Line in 2008. In December 2012, SD&AE entered into a 50-year operating lease for freight service with the Pacific Imperial Railroad (PIR) company. The lease requires that certain operating goals and repairs take place within a specific time frame. In 2013, PIR began its reconstruction plan of the Desert Line segment of the railroad, including assessing the condition of 57 bridges, performing necessary repairs, and testing trains.

It is expected that rehabilitating and upgrading the eastern section (Desert Line) of the SD&AE will substantially improve the international and interstate movement of goods from this region, as well as provide greater access to agricultural products from the Imperial County by providing a much needed link for supply and finished products between the United States and Mexico. The establishment of a crossborder rail connection to the maquiladora industry in northern Baja California will provide exporters an alternative to transporting goods by truck, which will in turn increase efficiency and relieve freight network congestion.

In Mexico, directors of Baja California Railroad, Inc., announced in 2013 that they plan to spend \$20 million on rebuilding a 44.4-mile section of the Tijuana-Tecate Short Rail Line. Under a contract with the Baja California agency, the Tijuana-Tecate Short Line Administrator (*Administradora de la Vía Corta Tijuana-Tecate* or ADMICARGA in Spanish), Baja California Railroad has committed to invest the money in repairs and upgrades to the line over the next five years.

Maritime transportation at our local ports plays an important role in the region’s transportation system as well. The Ports of San Diego and Ensenada are vital links to national and international networks, moving millions of metric tons of cargo every year. The Ensenada Port expanded its Customs House in 2013, and is currently expanding its navigation areas. Its port gates are being modernized and are expected to be complete in 2015, and its Multiple Use Terminal II is being expanded, which is expected to be complete in 2016.<sup>15</sup>

While the Port of San Diego also has expansion plans, its growth must occur within its fixed existing footprint. Given this restriction, its business plan includes terminal optimization, making the port more environmentally sustainable, and supporting the U.S. Department of Transportation’s America’s Marine Highway (AMH) program, which is an initiative to divert existing truck traffic to move by water where market conditions favor such a diversion.<sup>16</sup> Ensenada and the Port of San Diego also coordinate their respective strategic agendas in order to attract and accommodate growing trade from the Pacific Rim that is destined for the West Coast. The ports of Ensenada and San Diego are also key partners in regards to cruise ship and recreational boating business. The economic impact of cruise ship business is substantial, generating \$1 million in local

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<sup>15</sup>Administración Portuaria Integral de Ensenada, S.A. de C.V.

<sup>16</sup>Unified Port of San Diego

economic benefits when a cruise ship makes a port of call stop, and \$2 million for home port cruises.<sup>17</sup> Part of any port's ability to attract new cargo depends on the region's ability to move those goods from the waterfront to destinations both within and outside of the region. Therefore, efficient transportation systems in the form of roadways, railways, land ports, and air cargo facilities are key compliments for a port's successful growth.

Our region possesses an extensive system of private, commercial, and military airports; however, the regional passenger and cargo facilities are close to reaching their maximum capacity. In Baja California, the Tijuana and Mexicali airports were partially privatized to improve operations, and these airports do serve passengers from both sides of the border. The San Diego County Regional Airport Authority (Airport Authority) is responsible for planning for meeting the future projected passenger and air cargo needs. The Airport Development Plan (ADP) is the master-plan for the San Diego International Airport and identifies improvements that will enable the airport to meet demand through 2035, which is when it is estimated that the airport's single runway will reach capacity for passenger activity. While constructing an additional runway is not an option being considered for meeting increasing demand, the ADP aims to improve access to the airport, develop terminal facilities to accommodate future demand, optimize the productive use of the airport property, and provide parking facilities to satisfy the growing demand.<sup>18</sup>

As part of the solution to strained regional air capacity, a project is underway to build a crossborder airport facility between Tijuana and San Diego (Cross Border Xpress). The Cross Border Xpress project is led by a public-private partnership and would enable ticketed airline passengers who pay a toll to travel between Mexico's Tijuana International Airport (TIJ) and San Diego, California, via an enclosed, elevated pedestrian bridge. The Cross Border Xpress will consist of a main building on the U.S. side of the border housing U.S. Customs and Border Protection (CBP) inspection facilities, along with shops and services to accommodate travelers; an approximately 390-foot pedestrian bridge from the main building on the U.S. side connecting into TIJ's passenger terminal on the Mexican side; and parking facilities and areas for car rentals and potentially bus service on the U.S. side. The Cross Border Xpress is expected to open in late-2015 and investors expect it will serve approximately two million passengers annually, a number that is forecasted to increase to nearly five million by 2030.

## Public and Active Transportation

Expanding public transportation networks, as well as improving facilities for pedestrians and cyclists are critical areas of focus in transportation planning. Not only are public and non-motorized transportation essential parts of the overall transportation system, but they are increasingly important given their environmental and public health benefits.

### Public Transportation

The Metropolitan Transit System (MTS) operates three Trolley lines and a network of bus lines that served an all-time high of 95 million passenger trips in fiscal year (FY) 2014. The Blue Line, which connects downtown to the U.S.-Mexico border at San Ysidro, continues to be the service with the highest ridership, with over 15 million passenger trips in FY 2014. In northern San Diego County,

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<sup>17</sup>Ibid.

<sup>18</sup>San Diego County Regional Airport Authority

passenger light rail services are provided by the North County Transit District; the COASTER commuter train serves eight stations between Oceanside and downtown San Diego and the SPRINTER trains run east-west between Oceanside and Escondido. Many projects are underway to expand public transportation services across the county, including the following projects that provide increased connectivity in the border region: the Mid Coast Corridor project which will extend the terminus of the Blue Trolley line from the Old Town Transit Center to UC San Diego and University City; and the implementation of a Bus Rapid Transit (BRT) service in the South Bay connecting the Otay Mesa POE to downtown San Diego via Chula Vista.

According to a 2011 study conducted by Tijuana's Metropolitan Institute of Planning (*Instituto Metropolitano de Planeación de Tijuana* or IMPLAN in Spanish), just over half of Tijuana residents use public transit, meaning more than 800,000 people depend on the system daily. According to data from the Municipality of Tijuana, this demand is served by approximately 7,500 regular fare and shared route taxis, and more than 3,500 shuttle and bus services that operate on 107 routes and are managed by 12 different concessionaires.

Recently, the Municipality of Tijuana announced its Tijuana Integrated Mass Transit System (*Sistema Integral de Transporte Masivo de Tijuana* in Spanish) project, which is included as a committed project in the National Transportation Infrastructure Investment Program and financed through Mexico's Mass Transit Program (*Protram, Programa de Transporte Masivo* in Spanish). The system will include two BRT trunk routes and a number of feeder routes with regular passenger buses. According to the plans, Route 1 will start in downtown Tijuana, connecting to the San Ysidro-Puerta México-El Chaparral POE via a dedicated lane on Paseo Centenario, and extending to the east of Tijuana along the Tijuana River channel to the right of the Express lane or *Vía Rápida*. Route 1 extends for about 17 kilometers in one direction, and will have 36 stations, 3 transit centers, 11 new pedestrian bridges, and 3 new vehicle bridges. Twenty feeder routes will connect with Route 1. There will also be 46 160-passenger articulated buses and 100 45-passenger buses, all of which will use LNG. The city estimates this system will save users 50 percent on total transit fares, and 60 percent on travel time. The implementation of the first route is anticipated to be complete by late 2015 and the second route is planned to be implemented next and will connect the Otay Mesa-Mesa de Otay POE with southwestern Tijuana.

## Active Transportation

Active or non-motorized transportation is any mode of transportation that is powered by human energy, primarily walking and bicycling. The San Diego Regional Bicycle Plan (Plan) is a guide for the region through 2050 and proposes a vision for a system of interconnected bicycle corridors, support facilities and programs to make bicycling more practicable and desirable to a broader range of people. One of the bicycle routes included in the Plan's Early Action Program, which identifies 42 of the highest priority projects to be implemented first, is a route that will connect the San Ysidro border area to the Bayshore Bikeway. Planning for this route is expected to begin in 2015.<sup>19</sup>

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<sup>19</sup> SANDAG Proposed Regional Bike Plan Early Action Program Report, 2013

In terms of binational collaboration on active transportation, one of the most prominent joint efforts in the San Diego-Baja California region is the Bike to Work Day and the "*Tijuaneando en Bici*" sister events. Bike to Work Day is a national event celebrated annually in the United States on the third Friday in May, as part of National Bike Month. In San Diego, the event is organized by the SANDAG iCommute program, in conjunction with local jurisdictions, businesses, and several partners.

Beginning in 2011, the City of Tijuana joined the San Diego region each year in celebrating Bike to Work Day with its *Tijuaneando en Bici* program. The event encompasses bike rides on three bike paths and also includes a border crossing event at the San Ysidro POE, including a pit stop to assist bicyclists who crossed the border from Mexico, and concludes with an active transportation public forum in Tijuana.

"*Tijuaneando en Bici*" has become an important element of a larger Comprehensive Mobility Program currently being developed by IMPLAN, which includes a section on bike mobility. With input from local bicyclist groups, IMPLAN has identified 24 kilometers of basic "trunk" routes with a metropolitan and binational scope, and 18 kilometers of feeder routes for transportation with recreational and tourist purposes throughout Tijuana. These routes connect to public spaces and public transportation services. It also has outlined locations for bike rental programs, bike parking and lockers.

Through the creation of these safe and efficient protected bike paths, increased bicycling infrastructure, and public awareness and incentive programs, the goal is to increase bicycling as a mode of personal transportation so that it comprises 5 percent of total personal travel in the Tijuana metropolitan area. By implementing mass transit and active transportation projects, the city plans to reduce the use of private motorized vehicles.

Another effort underway to improve pedestrian and bicycle mobility in our border region is a study that the Imperial County Transportation Commission (ICTC) is leading to analyze existing conditions and access issues for people walking or bicycling across the six POEs that connect Imperial and San Diego Counties with Baja California. The study is called the Pedestrian and Bicycle Transportation Access Study of the California-Baja California Border Crossings. Though ICTC is the lead agency, SANDAG and Caltrans are part of the binational Agency Working Group that helps manage and inform the study, along with Mexican partner agencies. The study area is a one-mile radius around each POE, extending on either side of the border. The study is gathering data and ideas from previous studies as well as border crosser surveys, walking audits, and feedback from border travelers, community groups and public agencies in order make recommendations on how to improve facilities, infrastructure and connectivity for pedestrians and cyclists who travel through the POEs. The study is expected to be complete in early 2015.

## **Energy and Water**

The San Diego region and its neighbors are dependent upon both energy and water resources from outside the region. Therefore, diversifying our energy and water resources is a priority of the San Diego region, our neighboring counties, and the municipalities in Baja California.



## Energy Demand and Supply

Energy is fundamental to the San Diego and Baja California regional economies and the quality of life for the communities. Energy lights, heats, and cools homes and offices, runs businesses and industrial machines, delivers and heats water, and impacts nearly every facet of daily life. Abundant amounts of electricity (from renewable and nonrenewable sources) and natural gas are required.

Current trends indicate that San Diego regional electricity consumption will grow by up to 55 percent by 2050 due to increases in population, housing and the number of electronic devices used by families and businesses. Per capita consumption is projected to remain flat through 2020, and then grow by approximately 15 percent by 2050<sup>20</sup> due to advances in energy efficiency and distributed generation. Similarly, energy demand in Baja California is anticipated to grow by 5 to 8 percent annually for the next ten years<sup>21</sup> and is expected to continue to increase.

Baja California, which is geographically cut off from the mainland of Mexico, is actually connected to the energy grid system of the western United States through transmission lines across the California and Arizona borders. Therefore, Baja California's energy future is closely tied to that of the United States as well as that of Mexico. Consequently, both opportunities and challenges exist for crossborder energy generation, transmission, and coordination in the binational region. The anticipated growth in the population and economy of the border region will require continued efforts to plan and implement coordinated energy solutions.

Traditionally, the California-Baja California border region has relied on imported energy from outside sources delivered via gas pipelines, oil trucks, and power transmission lines to meet its energy demand. As a result, an important binational energy market has developed, as a number of power plants have been built or are planned in the California-Baja California region. The interdependence of the binational energy market in the region is evident by examining the relationship between electricity generation and natural gas.

Baja California depends mainly on natural gas to generate electricity, about a third of which is exported to California. San Diego Gas & Electric (SDG&E), which is a subsidiary of Sempra Energy, operates two binational transmission lines that connect the California electric grid system with the federal Mexican transmission system in Baja California. Together, these two lines are capable of exporting 800 megawatts of electricity from Baja California to California. Baja California exports electricity to California through these lines and from power plants near the binational border.

Baja California's electricity sector is the primary consumer of natural gas, representing 93 percent of the state's total consumption in 2009.<sup>22</sup> However, Baja California is not connected to Mexico's natural gas pipeline system and therefore does not have access to domestic natural gas. Sempra Energy owns and operates two bidirectional pipeline systems that transport natural gas into northern Baja California. Until 2007, regional consumption was entirely supplied by imports from the southern United States through pipelines that transport liquefied natural gas (LNG). In 2008 the region began to diversify its supply with the entry into operation of the LNG terminal in Costa Azul, 30 km from Ensenada, owned by Sempra.

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<sup>20</sup>SANDAG Regional Energy Strategy Technical Update, 2014.

<sup>21</sup>Based on data from the Mexican Secretariat of Energy

<sup>22</sup>Baja California: Perfil Energético 2010-2020 (<http://www.energiabc.gob.mx/files/public/pdf/PerfilEnergeticoBC2010-2020.pdf>)

It is expected that natural gas demand in Baja California will increase by an average of 2.4 percent per year, and by 2018, it is anticipated that total U.S. exports of natural gas to Mexico will increase by more than 100 percent.<sup>23</sup> Some of the increased exports to Mexico could be delivered via the El Paso Natural Gas system's southern mainline pipeline, which supplies the San Diego area and is currently underutilized. Given that the Southwest natural gas supply basins are relatively abundant, supplying the projected growth in exports to Mexico through this pipeline is viable. There are recent supply constraint concerns in the San Diego region due to the closure of the San Onofre Nuclear Power Plant in 2012, which reduced overall energy supply in the region, thereby increasing the demand for natural gas to replace the loss of nuclear power. To address this issue, SoCalGas and SDG&E are exploring options for expanding capacity of an existing pipeline, as well as building a new one that would connect SoCalGas' northern and southern systems.<sup>24</sup>

On the renewable energy front, the California-Baja California border region has a number of large-scale solar and wind projects and potential for more. The concentration of solar radiation is very high in both states, making them convenient locations for producing energy through solar technology. In fact, California leads the nation in terms of its solar and wind markets, supported not only by weather conditions, but also because of supportive energy policies. Established in 2002 under Senate Bill 1078, and expanded in 2011 under Senate Bill 2, California's Renewables Portfolio Standard (RPS) is one of the most ambitious in the country, requiring procurement from renewable energy sources for the state to be 33 percent of the total by 2020. California ranked number one in the United States in 2013 in terms of megawatts of solar energy capacity installed.<sup>25</sup> With regard to wind power generation, California ranks second in the United States for wind power installations.<sup>26</sup> San Diego in particular is also making great progress toward contributing to meeting the RPS goals, with 23.6 percent of SDG&E retail electricity sales generated from renewable sources in 2013.<sup>27</sup>

In Mexico, there are also three areas with high wind intensity, one of which is in the mountainous areas of Baja California, giving the border region strategic potential for the development of sustainable wind energy.<sup>28</sup> Between 2010 and 2012, two wind turbine installations became operational in the mountains of La Rumorosa, close to Mexicali in Baja California. To add to this existing wind power capacity, Semptra is developing *Energía Sierra Juarez*, a wind energy project that will install 47 wind turbines about 70 miles east of San Diego and just south of the U.S.-Mexico border. The wind power project will connect to the existing Southwest Powerlink at SDG&E's proposed ECO Substation in eastern San Diego County via a new crossborder transmission line. There are several additional wind energy projects that are being considered in Baja California, most of which are planned for export purposes.

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<sup>23</sup>Ibid.

<sup>24</sup>2013 Integrated Energy Policy Report (<http://www.energy.ca.gov/2013publications/CEC-100-2013-001/CEC-100-2013-001-CMF.pdf>)

<sup>25</sup>Solar Energy Industries Association

<sup>26</sup>American Wind Energy Association

<sup>27</sup>California Public Utilities Commission

<sup>28</sup>The State of the Border Report: A Comprehensive Analysis of the U.S.-Mexico Border, The Border Research Partnership, May 2013

In the near future, the interdependent energy relationship between Baja California and the southwestern United States, and specifically California, may change significantly; Mexico has plans to connect Baja California to the national electricity grid sometime in the next ten years. This connection would entail constructing an asynchronous link with an approximate transmission capacity of 300 megawatts in its first phase, and would effect changes in Baja California's now isolated energy market.<sup>29</sup>

The increase in regional energy generation could provide more opportunities for regional self-reliance, represents significant investment in the regional infrastructure, and encourage the use of cleaner-burning fuels than some existing plants in the binational region.

#### COBRO and the Regional Energy Working Group

Continued coordination between California and Baja California can help identify common issues, interdependencies, policies, and actions to address energy planning and infrastructure on both sides of the border. Two SANDAG forums for continued discussion are the Committee on Binational Regional Opportunities (COBRO) and the Regional Energy Working Group (EWG). COBRO organizes an Annual Binational Event to address a variety of border issues. In 2009 and 2010, the binational event addressed challenges, opportunities and strategies for crossborder climate change collaboration. Energy, as the largest contributor to greenhouse gas (GHG) emissions, played a significant role in the events.

The EWG is comprised of elected officials, business organizations, environmental groups, regional universities, and transportation and energy industry experts and meets monthly. The EWG oversaw development of the SANDAG Regional Energy Strategy (RES), which is the San Diego region's energy policy blueprint to improve quality of life through increased use of clean energy supplies in an efficient manner. Reducing energy use through conservation and efficiency has the co-benefits of reducing GHG emissions and utility bills, while improving the localized economy and air quality. The RES contains 11 goals, including an Energy and Borders Goal, which is to "integrate energy considerations into existing and future collaborative border initiatives".<sup>30</sup>

#### Water Supply

Most of the water used in all of Southern California and northern Baja California is imported from outside sources. This dependence on outside sources is cause for both conflict and cooperation. Whether used predominantly for agricultural purposes, as in the Imperial and Mexicali valleys, or needed to meet urban demand, increasing pressure is being placed upon these supplies as the population and economy continue to expand. Because water (like energy) is an integral component for a healthy economy, we should consider water reliability not just for ourselves, but for our neighbors as well. A failing neighboring economy can negatively affect our own region. Water authorities in the San Diego region, as well as its neighboring regions, are addressing water reliability issues for the future through a number of strategies. In order to reduce conflict, a cooperative approach will be necessary to assure water reliability for the entire region.

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<sup>29</sup>2013 Integrated Energy Policy Report (<http://www.energy.ca.gov/2013publications/CEC-100-2013-001/CEC-100-2013-001-CMF.pdf>)

<sup>30</sup>SANDAG Regional Energy Strategy , 2009

San Diego and Imperial Counties and the municipalities in Northern Baja California all rely heavily upon water delivered from the Colorado River. Colorado River water is brought to the western portion of the border region through two aqueducts, one on each side of the border. Water systems in San Diego and Tijuana-Tecate are united through an emergency connection, which can deliver water to Mexico in case of a failure of the delivery system on the south side of the border.

The 1944 U.S.-Mexico Water Treaty<sup>31</sup> signed by both countries assures water allocation to California and Mexico. Based upon the treaty, California's allotment is 4.4 million acre-feet (AF) per year, while Mexico's is 1.5 million AF per year. Of the allotted amount, the great majority of the water on both sides of the border is dedicated to agricultural production, while the urban areas make up their water supply with a mix of Colorado River water, other imported supplies (on the U.S. side), and local supplies such as groundwater, surface water captured in local reservoirs, and recycled water.

However, because of rapid economic and population growth along the border, both regions are facing increases in demand and therefore are exploring new ways to secure increased water resources for the future. A study released at the end of 2012 by the U.S. Bureau of Reclamation predicted a possible shortage of three billion cubic meters by 2035. In an attempt to overcome the projected water deficit that the Colorado Rivers Basin will face in the next 20 years, the United States and Mexico signed an amendment to the 1944 Treaty, called Minute 319. Minute 319, which will be in effect until 2017, calls for saving water through conservation improvements and gives Mexico a small amount of additional water in an attempt to restore the once fertile Colorado delta region. Likely options for assuring long term water reliability in this arid region include a mix of increased conservation, maximization of local supplies, water recycling, and desalination.

In fact, the San Diego County Water Authority is incorporating seawater desalination into its water supply portfolio. Desalination facilities are already in operation treating brackish groundwater from underground aquifers in the County. In addition, there is currently a seawater desalination plant under construction in Carlsbad that is expected to be completed by early 2016. The plant will be the largest in the Western Hemisphere and will meet 7 percent of the San Diego region's water demand.<sup>32</sup> The Water Authority is also planning the Camp Pendleton Desalination Project, which could produce 100-150 million gallons per day (mgd). In 2012, the Border Environment Cooperation Commission (BECC) certified a project for a desalination plant in Ensenada, Baja California. The plant is scheduled for completion in 2016 and is expected to supply water to 96,000 people in the municipality. As the only municipality in the state that does not receive water from the Colorado River, therefore depending largely on aquifers for its supply, the plant will be an important step toward sustainability for the area. In terms of binational efforts, the Water Authority is participating in a binational feasibility study of a large-scale desalination plant that would be constructed in Playas de Rosarito. The objective of this study is to evaluate the potential for constructing a desalination plant with a capacity of up to 75 mgd. The water supply from this project could be made available to U.S. and Mexican water users, and would help augment Colorado River supplies.

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<sup>31</sup>The legal name of the treaty is "The Utilization of Waters of the Colorado and Tijuana Rivers and of The Rio Grande"

<sup>32</sup>San Diego County Water Authority

## Imported Water Quality

A significant issue related to the allocation of Colorado River water is water quality, or salinity. Water from the river is used many times over. It is drawn out, used, treated, and discharged back into the river by many users before it has reached its southernmost destination. This results in a deterioration of the water quality, producing high levels of salinity by the time it reaches Mexico. High salinity levels make it difficult to grow certain crops, and can damage municipal and household pipes and fixtures.<sup>33</sup> The 1974 Colorado River Basin Salinity Act authorized the construction, operations, and maintenance of works in the Colorado River Basin to control the salinity of water delivered to Mexico. The salinity problem has been the object of several studies and investigations, and numerous surveys of salinity sources and control measures have been pursued over the years by the U.S. Department of Reclamation, the U.S. Geological Survey, the EPA, the Water Resources Council, the Colorado River Board of California, the Basin States, and several universities.

## Water Infrastructure

While both sides of the border face increasing water demand, existing water conditions differ on each side of the border. For example, per capita water use in Baja California is much lower than that of the San Diego region. The average per capita rate in Tijuana is 125 liters/day or 33 gallons/day<sup>34</sup>, while the rate in San Diego County is 150 gallons/day.<sup>35</sup> San Diego's geographic service area is nine times greater, representing 1,420 square miles (3,678 square kilometers) as compared to a service area of 152 square miles (392 square kilometers) in the Tijuana-Playas de Rosarito area.

Another major difference is in the existing infrastructure of each area. The San Diego region has very well developed water delivery systems; 100 percent of the population has access to potable water. Tijuana's infrastructure has been unable to keep up with the massive growth of the city. As a result, not all of the city's population has water delivery infrastructure. Significant efforts in recent years have resulted in greater coverage. It is estimated that in 2012, 95.9 percent of the population had potable water coverage<sup>36</sup>, constraining the poorest segment of the population to purchase water liter by liter, thereby spending a significant amount of their per-capita income on this basic human necessity.

Similar to its water delivery system, San Diego's wastewater collection system is capable of handling 100 percent of the wastewater generated. However, Tijuana's wastewater infrastructure only serves approximately 90 percent of the population.<sup>37</sup> This has significant implications on the city's ability to collect, recycle, and reuse existing resources and leads to negative water quality and human health, especially in times of rainy weather.

## Tijuana's Master Plan for Water and Wastewater Infrastructure

The U.S. Environmental Protection Agency (EPA) Border Environment Infrastructure Fund (BEIF), working through BECC and the North American Development Bank (NADB) with Mexico's National Water Commission (*Comisión Nacional del Agua*, or CNA in Spanish) has supported a number of

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<sup>33</sup>U.S. Department of the Interior, Department of Reclamation

<sup>34</sup>Mexico's State Commission of Public Services in Tijuana (*Comisión Estatal de Servicios Públicos de Tijuana*, or CESPT in Spanish)

<sup>35</sup>San Diego County Water Authority

<sup>36</sup>Mexico's National Institute of Statistics and Geography (*Instituto Nacional de Estadística y Geografía*, or INEGI, in Spanish).

<sup>37</sup>Border Environmental Cooperation Commission, 2012

wastewater-related projects in Baja California. In conjunction with the State Public Services Commission of Tijuana (*Comisión Estatal de Servicios Públicos de Tijuana*, or CESPT in Spanish), the agencies developed the Tijuana 20-year Master Plan for drinking water and wastewater facilities and improvements to the wastewater collection system throughout the city. The Master Plan is a long-term planning project that will investigate alternatives for meeting Tijuana's water and wastewater infrastructure needs over the next 20 years. The EPA estimates that Tijuana has \$1.2 billion in needs to meet the sewage infrastructure that will support its projected population in 2023. The Master Plan considers the following: potable water resources, including water reuse alternatives; potable water infrastructure; wastewater collection and conveyance; and wastewater treatment infrastructure, including pretreatment of industrial wastewater.

The Master Plan is an important step in averting a water disaster in the northern Baja California region. Given the proximity of our populations, the integration of significant sectors of our economies, and the social and cultural ties that we share, it is important for San Diego to support efforts in Tijuana and the entire northern Baja California region to upgrade the water supply and collection system.

#### **Binational Conveyance Study**

One example of a potential approach to ensure water reliability in the binational region is shared infrastructure across the border. The water authorities for San Diego County and Baja California concluded a binational study in 2002 to analyze the alternatives of transporting water from the Colorado River through a joint aqueduct. This study included technical information from both sides to evaluate the possibilities of a binational aqueduct and proposes alternative routes. However, it appeared that implementation of the proposed aqueduct was unlikely because Baja California's impending water needs were more immediate than those of San Diego. Therefore, Mexican authorities decided to expand their own aqueduct, the Rio Colorado-Tijuana Aqueduct and commissioned a project in 2007 to build approximately forty miles (64.4 km) of pipeline, and increase the capacity of six existing pumping plants. The aqueduct began operating at full capacity in 2011.

#### **Environment**

Ecosystems know no political boundaries. Flora and fauna, air, water, and the pollution that affect them are transverse through a system not restricted by national borders or political governance. Environmental issues are best addressed at a larger landscape level or ecosystem basis. To protect habitat, we should consider open space corridors for habitat in order to address the movement of species and ecosystem processes across a region. To address water quality, we should use a watershed perspective. To understand air quality, we need to understand air basins. Habitat corridors, watersheds, and air basins define a respective geographical area in which a particular ecological system functions. Our borders do not follow these lines, but our management of environmental issues should.

The San Diego region has made great strides in habitat management through the Multiple Species Conservation Program (MSCP) and the Multiple Habitat Conservation Program (MHCP). The region must work to link these efforts with similar efforts in the surrounding regions, and encourage similar consideration of open space planning where needed. Likewise, this region is responding to

challenges in water quality through a mixture of responses within jurisdictional boundaries and by collaborating across jurisdictional lines within larger watershed areas.

Regarding clean air, within the State of California, air quality is governed by a system that considers the basin level. However, this approach has not been successfully applied to the international boundary where environmental issues may cross the border, but regulation and enforcement do not.

## Habitat

With the rapid economic and social development in the binational region, finding the balance between new development and the conservation of the environment is an important challenge. The border region is home to habitat significant for the conservation of species of flora and fauna, including coastal sage scrub and chaparral vegetation. Because of the varied climate, topography, and vegetation, the region is one of the most ecologically diverse in the world.

Conservation biologists know the ecological area that encompasses much of Southern California and northern Baja California as the "California Floristic Province." In its entirety, the province runs from northern Baja California north to the California-Oregon border. The Province is considered one of the world's 25 hotspots for biodiversity conservation, with a large number of threatened and endangered species and habitats, including 24 species of flora and fauna currently identified under threat of extinction on the Mexican side of the border.<sup>38</sup> Places considered as "hotspots" are areas that harbor the highest concentrations of species (especially those species that do not exist in any other part of the planet, which are referred to as endemic species).

## Binational Conservation and Restoration Efforts

Significant opportunities exist for collaborative approaches to conserving portions of the province across the California-Baja California border. In 2002, the Tijuana River Estuarine Research Reserve (TRNERR) and the Tijuana City Council signed a Memorandum of Understanding (MOU) regarding the creation of conservation easements that would reduce environmental impacts on the TRNERR.

The United States and Mexico signed the first binational conservation easement in 2003. The easement protects the highest peak in Tecate, known as Cerro Cuchumá to the native Kumeyaay Indians, who consider the mountain sacred. This chaparral-covered mountain supports endemic plants and other species protected by Mexican law. The approximately 819 hectare easement restricts land uses to those consistent with the conservation of its biodiversity, such as research.

Also in 2003, environmental conservation organizations from both sides of the border collaborated to form the Las Californias Binational Conservation Initiative. The aim of the Initiative was to promote coordinated efforts to establish binational habitat corridors and protect biodiversity in the region. The Initiative made recommendations for specific actions to take in order to protect the region's natural resources and outlined a conservation network that would preserve the ecological integrity of the borderlands. The network proposed by the Initiative is partially based on an analysis launched by The Nature Conservancy, the Conservation Biology Institute and Pronatura, which identified areas with large, intact wilderness areas that represented regional biodiversity patterns

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<sup>38</sup>"Biodiversity on the U.S.-Mexican Border", World Watch Magazine, November/December 2004 Issue

and possessed irreplaceable resources and key landscape linkages that could ensure compatibility between human land use and wildlife movement and ecological processes. The Nature Conservancy has been involved in a number of land acquisitions that would expand protected natural areas in the transborder region in eastern San Diego County and Baja California, including studies and plans to maintain binational landscape linkages for bighorn sheep and mountain lions.

Another notable binational conservation effort in the border region was the formation of the “Biodiversity Along the Border” Committee in 2006. At its September 2006 meeting, the California Biodiversity Council (CBC) decided to create the Committee in order to identify next steps in addressing crossborder biodiversity and water quality issues. The Committee was comprised of representatives from government agencies and non-government organizations from both sides of the border and met four times in 2007. The committee also created two work groups, one of which was the Las California Work Group, whose mission was to preserve crossborder habitat linkages in the California-Baja California borderlands through binational cooperation. The work group explored ways to continue the work of the Las Californias Binational Conservation Initiative.<sup>39</sup>

In 2008, the Mexican Ministry of the Environment and Natural Resources (*Secretaría de Medio Ambiente y Recursos Naturales* or SEMARNAT in Spanish), the California Environmental Protection Agency, the California Department of Food and Agriculture and the State of California signed an MOU on Environmental Cooperation in order to promote and carry out broader collaborative activities with regard to environmental issues, including wildlife and habitat conservation.<sup>40</sup>

In 2009, the State Commission for Public Services in Tecate (*Comisión Estatal de Servicios Públicos de Tecate* or CESPETE in Spanish), the La Puerta Foundation (*Fundación la Puerta*, in Spanish) and BECC collaborated to restore wetlands adjacent to the Alamar River. The restored wetlands introduce plant species that help cleanse the river’s water, create areas for groundwater recharge, help reducing flooding, and provide refuge and food for resident and migratory birds.<sup>41</sup>

A binational seabird population restoration effort was launched on the Baja California Pacific Islands in 2011 with funds from the Montrose and Luckenbach Trustee Councils and the Government of Mexico and support from partner conservation organizations on both sides of the border. The partnership was slated to begin work in January 2012 on Coronado, Todos Santos, San Martín, San Jerónimo, Natividad, Asunción, and San Roque Islands, targeting seabird species that face threats from non-native species, nest and burrow destruction, and disturbances from lights and other man-made structures. Restoration projects will use decoys, mirrors, and broadcast calls and songs to increase social interactions and construct artificial nests to improve nesting opportunities. The partners will also conduct habitat restoration, reduce human disturbance and artificial light, and support environmental education in surrounding communities. This binational project will benefit seabird populations in both countries for years to come.

Binational conservation efforts present many challenges, including population growth and rapid development and differences in land ownership, legal framework, financial resources and existing conservation patterns. Despite these challenges, local, state, and federal agencies, and non-

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<sup>39</sup>California Biodiversity Council Biodiversity Along the Border Committee Final Report

<sup>40</sup><http://www.calepa.ca.gov/Border/Documents/2008/021308MOU.pdf>

<sup>41</sup>Otay Mesa-Mesa de Otay Binational Corridor Strategic Plan 2007-2012 Progress Report

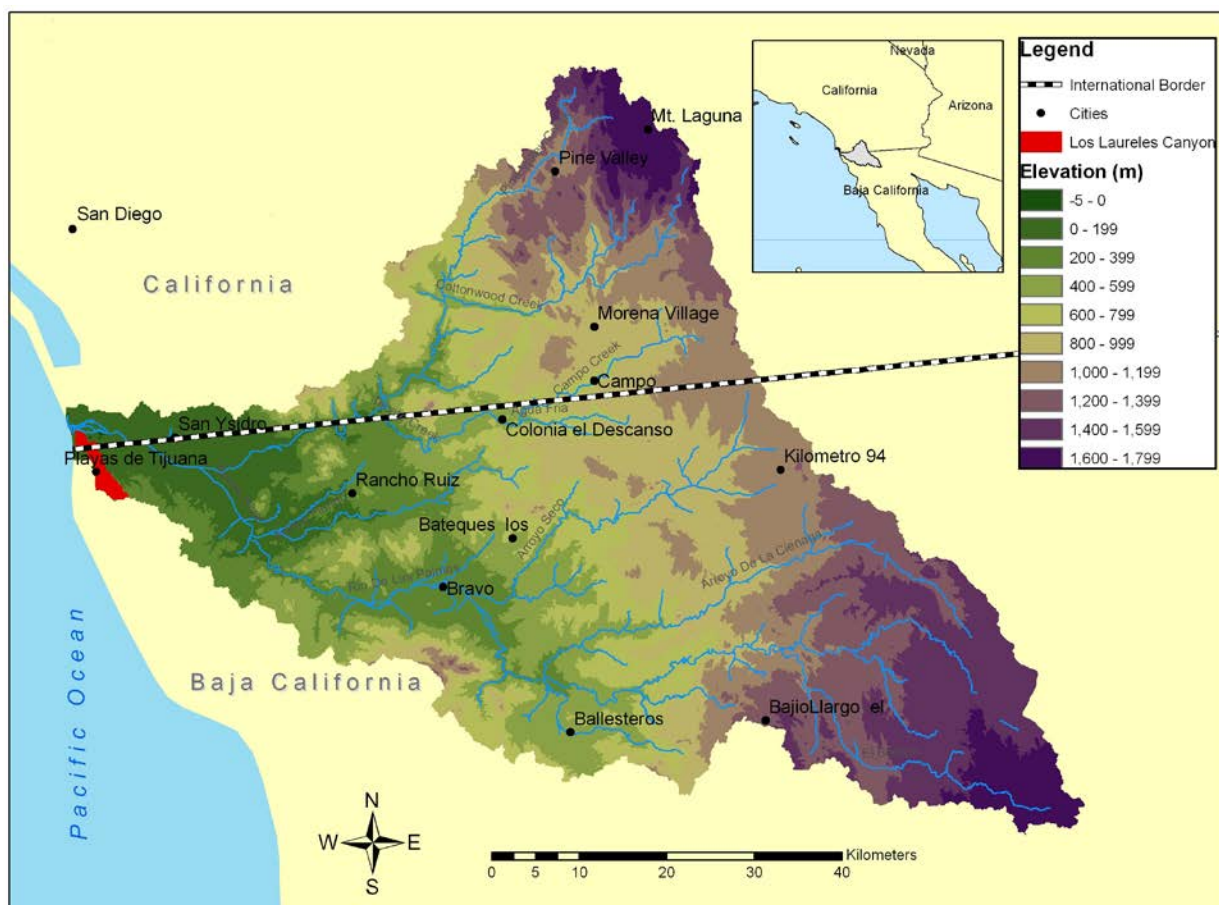


governmental organizations from both sides of the border have come together and continue to work collaboratively on conservation planning and habitat restoration.

### Watersheds & Water Quality

Besides sharing an important ecological region, San Diego, Tijuana, and Tecate share the Tijuana River Watershed, which encompasses approximately 1,750 square miles, one-third of which lies in the United States and two-thirds in Mexico as shown in Figure 4. The watershed runs 50 miles north-south and 70 miles east-west before draining into the Tijuana Estuary and the Pacific Ocean on the U.S. side of the border. The estuary became part of the U.S. Department of Commerce's National Estuarine Sanctuary Program in 1982, and was designated a National Estuarine Research Reserve (TRNERR). The watershed is one of the most important wetland/salt marshes remaining in Southern California and was designated a "wetland of international importance" by the United Nations' Ramsar Convention on Wetlands. The TRNERR protects and manages the natural and cultural resources of the Tijuana River Estuary, including endangered plants, fish and wildlife, by focusing on research and education along with compatible recreation and resource use.<sup>42</sup>

**FIGURE 4—TIJUANA RIVER WATERSHED**



Source: Map created by UC Santa Barbara's Donald Bren School of Environmental Science and Management with San Diego State University data.

<sup>42</sup>Tijuana River National Estuarine Research Reserve

Significant binational efforts have been made and are currently underway to address myriad issues throughout the watershed. The Tijuana River Watershed Binational Vision Project was established in 2002 to provide a framework for the many activities, projects, and research being conducted about the health of the watershed. Represented by a consortium of organizations and individuals including scientists, urban planners, academics, GIS specialists, community stakeholders, the Binational Watershed Advisory Council (BWAC) was formed with funding from the State of California, the County of San Diego, and San Diego State University to provide guidance for the Binational Vision Project by developing baseline information and a binational vision for the state of the watershed. Following the establishment of the BWAC, the EPA proposed that the Border 2012 Water Task Force for the Tijuana River Watershed be formed from the existing Advisory Council and interested stakeholders. The Border 2012 Task Force has focused on devising strategies and options for implementing that vision on the ground in order to meet the goals and objectives of Border 2012. The goals and vision established remain a part of Border 2020. Under the goal of improving access to clean and safe water, two objectives specifically relate to the Tijuana River Watershed: to “work bi-nationally to identify and reduce surface water contamination in transboundary waterbodies and watersheds;” and to “provide the public with timely access to water quality data in binational waterbodies and watersheds in a readily understandable, web-based format.”<sup>43</sup> One of the most visible issues affecting the westernmost portion of the watershed (which lies in the urbanized areas of Tijuana and San Diego) is that of sewage and other toxic pollutants entering the Tijuana River on the Mexican side of the border. These flows eventually cross the border and pass through the Tijuana Estuary before entering the Pacific Ocean. Unmitigated, the pollutants cause beach closures and pose serious human health threats on both sides of the border.

A major contributor to this problem is insufficient sewage collection infrastructure in Tijuana. To address this, the Tijuana Sewer Rehabilitation Project, known locally as “*Tijuana Sana*” (Healthy Tijuana), was certified by BECC and launched in 2002. Under Tijuana Sana, CESPT rehabilitated or replaced 160 miles of deteriorated wastewater collection pipe in the city over a four-year period.<sup>44</sup> CESPT continues to fund wastewater rehabilitation projects annually. In addition, the EPA is currently pursuing a continuation of the project, which is undergoing a public review process and would rehabilitate or replace 5.5 miles of collector lines and 47 manholes.<sup>45</sup>

The EPA is currently pursuing two wastewater collection system expansion and improvement projects in Baja California that were certified by BECC in 2012; one in Playas de Rosarito, and one in Tijuana. The projects will require a total investment of \$4.69 million and will benefit over 120,000 people.<sup>46</sup>

Another regional effort to minimize the amount of raw sewage that flows across the border was the construction of the International Wastewater Treatment Plant (IWTP), which was funded through the EPA and the Mexican government. The plant was completed in 1997 and is operated by the International Boundary and Water Commission (IBWC) on the U.S. side of the border, though both the United States and Mexico share in plant operation and maintenance.<sup>47</sup> The IWTP treats up to 25 mgd of Tijuana’s sewage, and has capacity for 100 mgd. The IWTP operates a dry weather

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<sup>43</sup> <http://www2.epa.gov/border2020/goals-and-objectives#goal2>

<sup>44</sup> <http://www.epa.gov/region9/border/infrastructure/tijuana-river-basin/docs/TJ-River-Basin-Area-Environmental-Assessment.pdf>

<sup>45</sup> <http://www.epa.gov/region9/nepa/epa-generated/tijuana-ww/tijuana-ww-draft-environmental-assessment.pdf>

<sup>46</sup> Border Environment Cooperation Commission (BECC) 2012 Annual Report

<sup>47</sup> The IBWC is an agency established by the governments of the United States and Mexico to resolve those differences that arise from the application of their boundary and water treaties.

diverter in the Tijuana River to collect up to 13 mgd of flow directly from the river and takes overflow sewage from the treatment system in Tijuana that would otherwise flow down the Tijuana River, through the TRNERR and be discharged untreated directly into nearshore waters and beaches of south San Diego County and Playas de Tijuana. The plant does not divert any flows from the river during wet weather. The original IWTP treated the sewage from Mexico to an advanced primary level, which technically does not meet standards set by the Clean Water Act in the United States. The plant was upgraded, and came online in 2010 to treat sewage at a secondary level (which meets U.S. requirements).

The Biodiversity Along the Border Committee formed by the CBC in 2006 created a Tijuana River Estuary Issues Work Group to address the environmental degradation of the Tijuana River Watershed. The work group identified strategies to improve the ecosystem health of the estuary, including the need for sewer systems for neighborhoods upstream of the estuary, new or retrofitted water diverters at the water treatment plant on the border, sediment basins on both sides of the border and solutions to stop the flow of trash and tires into the estuary.<sup>48</sup> The work group's strategies were well aligned with the TRNERR's activities. The Reserve leads Stewardship and Watershed Programs that includes activities with Mexican agencies and organizations focused in urban canyons near the Reserve. Among the main concerns addressed by the Watershed Program are erosion in the canyon which leads to sediment buildup that threatens native species, as well as pollutants, trash and invasive species entering the Reserve. Through various binational activities that rely on community volunteers, ongoing projects to clean up trash, build retaining walls with waste tires, as well as working to secure conservation easements, the TRNERR engages a broad range of stakeholders in the San Diego-Tijuana border region to reduce the environmental impact of human development on the watershed and preserve its beauty and natural resources.

In addition, through the Tijuana River Valley Recovery Team, which was established in 2008, many local agencies and organizations collaborate in an effort to address the problem of not only toxic sewage, but also sediment and trash that flows from Mexico across the border in the Tijuana River watershed, as well as habitat recovery and protection of sensitive species. To further these efforts, the IBWC and its Mexican counterpart, *Comisión Internacional de Límites y Aguas*, or CILA, convened the first binational meeting in 2013 to begin discussions to develop a new binational treaty amendment to the 1944 U.S.-Mexico Water Treaty. The new amendment or minute would set up a framework to work solve the problem of trans-border flow of trash, sediment, and wastewater from Tijuana into the River Valley and estuary.

## Air Quality

Air quality along the U.S.-Mexico border has traditionally been dealt with separately in each nation; however, it is now understood that the border region includes a number of cities that share common airsheds and the designated regulatory air basins of California do commingle with air on the Mexican side of the border.<sup>49</sup> As development continues along the border, air pollution from one side of the border may have negative effects on the other side, posing serious environmental and health risks.

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<sup>48</sup>California Biodiversity Council Biodiversity Along the Border Committee Final Report

<sup>49</sup>U.S. Environmental Protection Agency <http://www2.epa.gov/border2020/air-policy-forum>

Air pollution in Northern Baja California and San Diego is largely caused by motor vehicle traffic. Vehicles are a major source of air pollution by releasing ozone precursors, volatile organic compounds (VOCs) and particulate matter (PM) directly into the air. When vehicles drive on unpaved roads, they add to the problem by emitting dust into the air. Vehicular and other mobile sources of emissions contribute about three-fourths of all the air pollutants in San Diego County<sup>50</sup>, while in Tijuana, vehicles are responsible for most of the ozone precursor emissions, about half of the VOCs, and about three-quarters of PM emissions are caused by vehicles driving on unpaved roads.<sup>51</sup> According to EPA criteria, San Diego County does not meet federal clean air standards for ozone, and Tijuana does not meet the standards for ozone, carbon monoxide or PM.<sup>52</sup> At the State level, the San Diego air basin is designated non-attainment for fine particulate matter (PM<sub>2.5</sub>) standard.

Air pollution caused by vehicles idling at the land POEs is another air quality issue facing the San Diego-Baja California border region. Vehicle emissions during long border crossing wait times contribute to the San Diego County GHG emissions inventory, and affect the quality of air in the binational region, which can negatively impact public health as well. Based on a study examining fiscal year 2009 GHG emissions for all three border crossings in the region, emissions are estimated at 80,000 metric tons of carbon dioxide equivalents (CO<sub>2</sub>Eq), which accounts for 0.5 percent of total on-road transportation emissions in San Diego County.<sup>53</sup> On a per-vehicle basis, the majority of these emissions can be traced to commercial crossings of heavy duty diesel trucks at the Otay Mesa POE. Of the total 80,000 metric tons of CO<sub>2</sub>Eq, 45 percent is caused by idling vehicles.<sup>54</sup> The EPA conducted a Truck Stop Electrification Study in 2009 which explored options for eliminating heavy-duty diesel trucks idling at the Otay Mesa commercial crossing. The study estimated that 8,500 metric tons of CO<sub>2</sub> could be diverted from the atmosphere each year by reducing idling time from 90 to 22.5 minutes.<sup>55</sup>

In the San Diego region, all 19 jurisdictions have completed inventories of GHG emissions from government operations and from the community as a whole. In addition, BECC has worked with the Center for Climate Strategies to complete GHG inventories for all six Mexican border states. At a state level, California has been a pioneer in climate change policy with the California Global Warming Solutions Act of 2006 (Assembly Bill 32), and the Sustainable Communities and Climate Protection Act of 2008 (Senate Bill 375). Assembly Bill 32 requires California to reduce its GHG emissions to 1990 levels by 2020, a reduction of approximately 15 percent below emissions expected under a “business as usual” scenario. Senate Bill 375 supports the State’s climate action goals to reduce GHG emissions through coordinated transportation and land use planning with the goal of more sustainable communities. In 2012, Baja California was one of the first states in Mexico to publish its state climate change law, which will support the implementation of Mexico’s national climate change plan. Baja California’s program will receive technical assistance from BECC also established a Climate Change Council.<sup>56</sup>

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<sup>50</sup> San Diego Air Pollution Control District, Air Quality in San Diego 2013 Annual Report

<sup>51</sup> “Air Quality and Economic Development Along the California/Baja California Border: Can We Have Both?”, Briefing Paper for San Diego Dialogue’s Forum Fronterizo, October 2002

<sup>52</sup> San Diego Air Pollution Control District; and Southwest Consortium for Environmental Research and Policy Monograph Series, no. 10, “Improving Transboundary Air Quality with Binational Emission Reduction Credit Trading”, 2004

<sup>53</sup> Greenhouse Gas Emissions Due to Vehicle Delays at the San Diego-Tijuana Border Crossings, Suzanne Louise Barzee, 2010

<sup>54</sup> Ibid.

<sup>55</sup> [Truck Stop Electrification and Anti-Idling as a Diesel Emissions Reduction Strategy at U.S.-Mexico Ports of Entry, 2009](#)

<sup>56</sup> [Ley De Prevención, Mitigación y Adaptación Del Cambio Climático Para el Estado de Baja California](#)

With regard to binational collaboration, at a national level, Presidents Obama and Calderon established the U.S.-Mexico Bilateral Framework on Clean Energy and Climate Change in 2009. The Framework created a mechanism for political and technical cooperation and information exchange and promotes efforts that are part of the EPA Border U.S.-Mexico Environmental Program (Border 2012 and Border 2020). A San Diego/Tijuana Air Quality Task Force was formed under Border 2012. Although the Task Force was disbanded in 2012, one of the EPA's Border 2020 Program's five Policy Fora is Air Policy, and includes specific goals for improving air quality in the border region. In addition, an MOU on Environmental Cooperation between California EPA, the California Department of Agriculture, the California Resources Agency, and SEMARNAT was signed in 2008 and climate change was identified as one of the priority areas of action.

The California Air Resources Board (CARB) still maintains an active collaborative relationship with SEMARNAT and the Ministry of Environmental Protection (*Secretaría de Protección al Ambiente* or SPA in Spanish) to work on border air quality issues. One of the principal joint efforts underway is maintaining the Baja Air Quality Monitoring Network, which measures PM10, PM2.5, ozone and other pollutants in Tijuana, Playas de Rosarito, Tecate, and Mexicali. In addition, CARB and the Bureau of Automotive Repair are assisting SPA in implementing its smog check program. There have been efforts to explore the possibility of using binational emission reduction credit trading between the United States and Mexico as a way to help meet national GHG reduction goals. By trading GHG emission credits, overall costs could arguably be reduced, however there are significant challenges in regards to harmonizing the national systems in order to link them and allow international trade.<sup>57</sup>

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<sup>57</sup>[Linking National Cap-and-Trade Systems in North America](#), Matthew Bramley, P.J. Partington and Dave Sawyer, December, 2009; and Southwest Consortium for Environmental Research and Policy Monograph Series, no. 10, "Improving Transboundary Air Quality with Binational Emission Reduction Credit Trading", 2004

**San Diego Association of Governments**  
**COMMITTEE ON BINATIONAL REGIONAL OPPORTUNITIES**

September 2, 2014

AGENDA ITEM NO.: **7**

**Action Requested: RECOMMEND**

OUTCOMES FROM THE 2014 BINATIONAL SEMINAR - "EFFICIENT  
BORDER: A GLOBALLY COMPETITIVE REGION" AND  
TASK FORCE RECOMMENDATION

File Number 3400200

**Introduction**

The 2014 Binational Seminar "Efficient Border: A Globally Competitive Region" was held on Tuesday, June 3, 2014, at the Southwestern College Higher Education Center in Otay Mesa. The SANDAG event had the sponsorship of Southwestern College; Caltrans, District 11; Otay Mesa Chamber of Commerce; the Consulate General of Mexico in San Diego; the American Planning Association; and the City of Tijuana. The seminar focused on the border region's economic strengths and major infrastructure challenges and the need to increase efficiency at the border in order for our binational region to compete in the globalized world economy. The event was attended by stakeholders and representatives from government, planning agencies, academia, and the private sector from both sides of the border. A White Paper was prepared for the event containing an overview of border crossing infrastructure and trade for the land Ports of Entry (POEs) in the San Diego-Baja California region, information about a study that analyzes crossborder economic connections, as well as an overview of key United States-Mexico border institutions and working groups, intended to provide background and context for discussions on border efficiency and competitiveness, and strategies to advance the future of our border region. A summary of the event is attached to this report (Attachment 1).

**Recommendation**

Based on discussion of key points made at the 2014 Binational Seminar, the 2014 Binational Seminar Task Force participants propose that COBRO consider the following:

- Use some of COBRO's upcoming meetings to explore alternatives that will enable stakeholders to discuss the region's needs for improved collaboration to assure a prosperous future and to identify ways to more effectively communicate those needs to the community and government representatives on both sides of the border.

**Discussion**

The 2014 Binational Seminar is part of an ongoing effort that SANDAG initiated some years ago to work toward effective binational planning by strengthening regional collaboration. Continuing along these lines, the purpose of the event was to present and analyze the key factors that contribute to the border region's competitiveness and prosperity, to develop strategies to overcome challenges, to seek input, and to discuss potential opportunities for more efficient collaboration. Its purpose also was to promote discussion on how border crossing issues fit within bilateral priorities,

and to explore successful tools or collaborative efforts that have been utilized in other areas that could be applied to issues of border crossing wait times. In addition, the seminar highlighted a recent study that provides new insights into crossborder economic connections as key contributors to local, state, and national economic growth.

Welcome and introductions were given by SANDAG Board of Directors Chair Jack Dale; Hon. Remedios Gómez-Arnau, Consul General of Mexico in San Diego; Xavier Peniche, Secretary of Economic Development, City of Tijuana; Laurie Berman, Director of Caltrans District 11; and Dr. Paul Ganster, Chair of the SANDAG Committee on Binational Regional Opportunities (COBRO). The presentations began with setting the stage for a discussion on an efficient border by SANDAG Executive Director Gary Gallegos. This briefing was followed by the keynote address delivered by Raúl Urteaga, General Coordinator of International Relations for the Mexican Ministry of Agriculture, Livestock, Rural Development, Fisheries and Food (SAGARPA). Mr. Urteaga outlined his international development experience, including the negotiation of the North American Free Trade Agreement (NAFTA) and argued that the San Diego-Tijuana border region should take advantage of and further promote itself as a binational region in order to attract new economic investment. He suggested ideas for increased binational collaboration in order to advance the competitiveness of the region, including academic exchanges, energy integration, and joint promotion of shared assets.

The second part of the event included two panels. The first panel was a group presentation entitled "Efficiency and Competitiveness on the Border" and was comprised of the following panelists: Alejandro Díaz-Bautista, Colegio de la Frontera Norte; Marney Cox and Daniel Flyte, SANDAG; Michael Combs, San Diego Regional Economic Development Corporation; and David Shirk, UC San Diego Center for U.S.-Mexico Studies. The second panel was a roundtable discussion entitled "Addressing Challenges and Opportunities for an Efficient Border," and included the following panelists: Mario Orso, Caltrans; Luis Duarte, Colegio de Arquitectos de Tijuana; Paola Ávila, San Diego Regional Chamber of Commerce; Cindy Gompper Graves, South County Economic Development Council; James Clark, San Diego-Tijuana Smart Border Coalition; and, Jason M-B Wells, San Ysidro Chamber of Commerce. The discussion focused on innovative ideas to address border challenges and take advantage of opportunities in order to improve border efficiency, and open discussion with audience members. After the panel discussion, Dr. Paul Ganster offered concluding remarks. Hon. Jack Dale hosted the event, and Retired State Senator Denise Moreno-Ducheny moderated the discussions.

The following are highlights of comments made during the event:

- In order for the San Diego-Tijuana region to be vibrant and competitive in North America and on a global scale, it needs to be innovative and look to the future, finding new tools to improve systems, including the introduction of new technology wherever it has the potential to increase efficiency.
- Promote the San Diego-Tijuana border region as a destination for companies to locate manufacturing facilities to take advantage of crossborder joint production capacity, as well as the region's prime location for accessing markets in the North American and Pacific regions.
- Provide and share factual, statistically based data on both sides of the border that can inform policy decisions and help justify many of the improvements the border region needs.



- Collaboration and partnerships between stakeholders are essential for unifying the border region and advancing projects in order to achieve the shared goal of increased efficiency.
- Implement crossborder educational exchange programs that will not only help promote the region in terms of having strong human capital to improve regional competitiveness, but will also develop a basis to alter impressions and stereotypes that will ultimately enhance diplomacy between the two nations.

The COBRO Binational Seminar Task Force, formed by Chair Paul Ganster; Juan Carlos Rivas and Alicia López, Consulate General of Mexico in San Diego; Nathan Owens, UCSD San Diego Dialogue; Mario Orso, Caltrans District 11, Heidy Salum, State of Baja California; Arturo González, City of Tijuana; and Retired State Senator Denise Moreno Ducheny met on August 5, 2014, to discuss the outcomes and thematic highlights from the program and public participation during the 2014 Binational Seminar (Attachment 2), and prepared a recommendation for COBRO's review and input.

The Task force reviewed comments and suggestions made during the seminar, and concluded that most of issues are recurrent and coincide with previous statements made during the 2012 and 2013 events, which at that time were reflected in recommendations, and later were approved by the Board of Directors. This was interpreted as a symptom of the frustration that prevails in the region in terms of border efficiency.

The group agreed that, unfortunately, there is not much new happening in terms of the bilateral agenda, except the new environment created by the High-Level Economic Dialogue (HLED); while at a local level important infrastructure projects are currently under way in our border region.

The Task Force discussion focused generally on what is needed in order for the San Diego-Baja California region to be prosperous and competitive in the future. A major challenge that the group recognized as inhibiting the region's ability to leverage the strength of the binational relationship is that border region efforts tend to take place in silos, and there is a lack of a regional "umbrella" organization that brings together stakeholders from all disciplines and sectors, and a connection with what is happening at a federal level. This challenge was also identified and discussed as a result of the 2013 binational seminar, so it was a recurring theme.

The Task Force members discussed how the region can be better organized in order to take advantage of our shared resources and collaborate to come up with innovative approaches to address the region's needs. While the Task Force acknowledged that the various structures in the United States and Mexico are not necessarily parallel and direct counterpart of agencies and organizations do not always exist, therefore, the group agreed that instead of creating a new mechanism as an umbrella group for the region, it would be better to build upon an existing forum. The members suggested using future COBRO meetings to continue this discussion about how to convene stakeholders across sectors that can cater to the region's needs for a prosperous future and more effectively communicate those needs to the community and government representatives on both sides of the border. After more discussions are held, COBRO can determine whether or not to continue this discussion as the focus of the 2015 binational seminar.



**Next Steps**

Subject to COBRO's recommendation, staff will prepare a proposed schedule of meetings focused on the discussion outlined in the recommendation in order to arrive at a conclusion and a possible theme for the 2015 binational event.

Attachments: 1. Summary of the 2014 Binational Seminar  
2. Thematic Highlights from the 2014 Binational Seminar

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Our border region is located at the crossroads of busy international trade corridors. An efficient border and increased regional collaboration will contribute to improve our global competitiveness.

Tuesday, June 3, 2014

12:00 – 4:30 p.m.

Southwestern College, Otay Mesa

8100 Gigantic Street, San Diego, CA 92154

1. REGISTRATION AND NETWORKING TIME
2. WELCOME AND INTRODUCTORY REMARKS

(Hon. Jack Dale, City of Santee Councilmember and Chair of SANDAG Board of Directors; Hon. Remedios Gómez-Arnau, Consul General of Mexico in San Diego; Xavier Peniche, Secretary of Economic Development, City of Tijuana; Dr. Paul Ganster, Director of the Institute for Regional Studies of the Californias at San Diego State University and Chair of SANDAG Committee on Binational Regional Opportunities; and Laurie Berman, Director of Caltrans District 11)

Hon. Jack Dale, Chair of the SANDAG Board of Directors, called the event to order, welcomed participants, and thanked those involved in the planning and organizing of the event, as well as those present for the seminar. He then introduced Hon. Remedios Gómez-Arnau, Consul General of Mexico in San Diego, to give her welcome remarks.

Hon. Remedios Gómez-Arnau thanked SANDAG for organizing the event and thanked the Chairs and members of the Borders Committee and the Committee on Binational Regional Opportunities (COBRO). Consul Gómez-Arnau noted the importance of the seminar in order to continue the dialogue and interaction between stakeholders to improve the development of the border region, and North America in general. She referenced the recent High Level Economic Dialogue (HLED) between the two countries' leaders and how together they formed new standards of global commerce, education, sustainable development and innovation. She outlined how these standards can be categorized into four areas: Competitiveness and trade; new ideas and opportunities; energy; and security.

Hon. Jack Dale introduced the moderator for the final panel discussion, Former California State Senator Denise Moreno Ducheny.

Hon. Jack Dale then introduced Xavier Peniche, Secretary of Economic Development for the City of Tijuana, Baja California, Mexico.

Xavier Peniche, Secretary of Economic Development for the City of Tijuana opened by thanking SANDAG and the other seminar partners for their work in putting the event together and for inviting the City of Tijuana officials. Mr. Peniche stressed the magnitude and significance of the Calibaja border region by pointing out that it is the largest binational region in the world and is home to the busiest land port of entry. He underlined that the City of Tijuana will be a partner in the efforts to continue making the border region more efficient and prosperous.

Hon. Jack Dale introduced Dr. Paul Ganster, Chair of COBRO and Director of the Institute for Regional Studies of the Californias at San Diego State University.

Dr. Ganster noted that COBRO meetings, along with other platforms such as the annual joint meeting of the Borders Committee, COBRO, and the Municipalities and State of Baja California, and the annual binational seminar, provide a unique opportunity to come together and discuss issues of shared concern. Dr. Ganster expressed the importance of people's input at the seminar in order to better develop a plan of action moving forward.

Hon. Jack Dale introduced Laurie Berman, Caltrans District 11 Director.

Laurie Berman, Director of Caltrans District 11 thanked the audience for traveling to the border area and briefly spoke about the significance of crossborder interaction and information sharing as integral components in maintaining strong partnerships in order for California and Mexico to succeed in the global market place. She highlighted that since 2009, a total of \$4.9 billion dollars have been invested or programmed in the border region to improve and help safely facilitate the movement of goods and people.

Hon. Jack Dale introduced Gary Gallegos, Executive Director of SANDAG.

### 3. SETTING THE STAGE FOR A DISCUSSION ON AN EFFICIENT BORDER (Gary Gallegos, SANDAG)

Gary Gallegos began by stating that the work of organizations like SANDAG dates back to the 1960s when the notion of regionalism was beginning to advance. He noted that when the 18 cities and the County in the region are together and unified, more can be accomplished. Mr. Gallegos stated that local governments have many opportunities and challenges, but SANDAG is unique in that it has the opportunity to collaborate and continue building relationships with Mexico in an effort to advance the mega region and that these relationships are something the agency is proud of.

Mr. Gallegos continued by outlining a bit of SANDAG's history and its transition from a Joint Powers Authority (JPA) to a State mandated Metropolitan Planning Organization (MPO) in 2002 and noted that it was a pivotal moment for the agency because its powers became official under the California state constitution. Mr. Gallegos said that because of this transition, committees such as the Borders Committee were formed and gained permanence. He continued by highlighting some of the successes of the Borders Committee, including the Otay Mesa Binational Corridor Strategic Plan, which he described as a roadmap for an effective way to work together as neighbors. He discussed some of the changes that came about in the border region soon after the September 11, 2001 attacks, including a shift that

put more emphasis on security. Along those lines, he spoke about a study conducted on the economic impacts that border wait times have on the economy, including a comparison that equated the economic loss from an inefficient border with the San Diego region missing out on hosting numerous Super Bowls every year. He concluded by stressing the importance of relationships and coalition-forming in order to position the binational region to become more competitive and innovative. Along those lines, he spoke about a recent trip to Mexico City where he learned about the major reforms Mexico is taking on. More importantly, he met Mexican officials who taught him more about how decisions made in the United States affect Mexico, citing the example of crude oil pricing. He then introduced the keynote speaker, Raúl Urteaga, from the Mexican Ministry of Agriculture, Livestock, Rural Development, Fisheries and Food (SAGARPA in Spanish).

4. **KEYNOTE SPEAKER** (Raúl Urteaga, Mexican Ministry of Agriculture, Livestock, Rural Development, Fisheries and Food (SAGARPA)).

Mr. Raúl Urteaga began by thanking SANDAG and the members of the audience for inviting him to speak at the seminar. Mr. Urteaga outlined his previous international development experience, including the negotiation of the North American Free Trade Agreement (NAFTA). He noted that having spent many years working outside of North America, mainly in Japan, he brings a new perspective of what is happening after 20 years of NAFTA, and what we should be focusing on in the border region in the future. He described how the border region could implement new initiatives and proposals, such as NAFTA did, to combat challenges. Mr. Urteaga noted that while the United States is an important trading partner for Mexico, Mexico also is party to many trade agreements with other countries, most notably Japan and countries in the European Union. He briefly spoke about Mexico's importance and presence in the global economy by describing how although Brazil is the dominant economy in Latin America, having twice the population and gross domestic product of Mexico, Mexico currently exports twice as much as Brazil. Mr. Urteaga said this is evidence of how Mexico has evolved over the last few decades, not only as an important manufacturing center, but also in services and the agricultural sectors as well. He continued by speaking about how many other countries such as China and Korea have also taken on trade initiatives and have therefore had success in their economic development. He remarked that regions in the Pacific Rim, such as the San Diego-Tijuana border region, and the State of California in general, should take advantage of becoming involved in these new economies.

Mr. Urteaga continued his presentation by outlining the process for negotiating trade agreements such as NAFTA, and more recently, the Trans-Pacific Partnership (TPP). Alluding to his comments earlier on new initiatives and proposals, Mr. Urteaga noted his belief that the United States and Mexico could form a partnership and take advantage of and further promote areas in which they have strong collaboration, such as U.S. President Obama's National Export Initiative, the objective of which is to double American exports worldwide. He said that Mexico could play an integral part in that initiative's goals.

Mr. Urteaga expressed that partnerships between countries are not only about the exchange of goods and services, but also about cooperation, diplomacy, and dialogue. He noted that diplomatic channels and communication are key to successfully overcoming challenges, including in regards to issues such as climate change, educational exchange, and genetically modified organisms in agriculture. Mr. Urteaga argued that although these issues present challenges, they could also present opportunities, such as providing employment for people in research and development.

Mr. Urteaga described how changing the perspective people have in both the United States and in Mexico is critical to the advancement of both countries and the successes of future collaborations. This includes the perspective that Americans hold of Mexico, and vice versa. He noted that a great way to overcome or change perspectives is to have students participate in education exchange programs. Mr. Urteaga said that young people, specifically students, are the next generation, and thus hold the key to changing the perspectives.

Mr. Urteaga mentioned some of the key discussions that came out of a convention of the Americas Chamber of Commerce, which held its annual meeting in Mexico City recently. He noted that there was a discussion on the economic impact of current border wait times, which he said impact job creation as well. In addition, he mentioned that the notion of an educational exchange between students was also brought up at the annual convention as a form of collaboration and a means to ensure the next generation of workers has the skills it needs for future job markets. In regard to collaboration, Mr. Urteaga cited examples of strong partnerships between neighboring countries, including the electricity grid integration between the Southern California and Tijuana, and more recently, the initiatives and dialogues taking place at the federal level.

Mr. Urteaga concluded his presentation by describing areas of opportunity for collaboration between the North American countries. He stated that Mexico is currently undergoing many policy reforms, including in the areas of energy policy. Mr. Urteaga spoke about this reform as a smart policy initiative that Mexico is currently undertaking in hopes of successfully opening new opportunities for energy investments and collaborations. Mr. Urteaga continued by observing that Canada and the United States currently have a strong partnership in terms of energy. He commented that Mexico is the missing link and that hopefully its energy policy reforms will allow the country to be a part of that partnership, which will create a stronger and truly unified North American energy economy. He finished his remarks by speaking about the role border cities have in advancing certain sectors. As an example of how the San Diego-Tijuana region stands to benefit from working together, he pointed to the Tijuana International Airport crossborder terminal as a collaborative solution to meet the high demand in the region for flights to and from Asia. He declared that the best way to advance the border region is to jointly promote it as a true binational economy. Mr. Urteaga again thanked SANDAG for the invitation and the audience members for listening to his presentation.

5. EFFICIENCY AND COMPETITIVENESS ON THE BORDER (Alejandro Diaz-Bautista, El Colegio de la Frontera Norte; Marney Cox and Daniel Flyte, SANDAG; Michael Combs, San Diego Regional Economic Development Corporation; and David Shirk, UC San Diego Center for U.S.-Mexico Studies)

Gary Gallegos presented each member of the panel, and introduced Marney Cox, SANDAG Chief Economist, to begin the panel presentation.

Marney Cox briefly outlined the methodology for the study that the panel was going to present. He stated that in order for the public sector to support what is going on in the local economy, promote prosperity and job creation, research of private sector clusters must be conducted to identify and determine how to work together. He noted the importance of recognizing the connections and the size of those connections in local industry clusters because they determine which industries the region is competitive in. Mr. Cox explained that the study would investigate what the drivers of the local economy are in order for the public sector to identify ways it can support and provide the benefits necessary for the private sector to continue competing in a globalized economy. He specified that core drivers of the economy are those responsible for producing jobs and output at a more significant rate. Mr. Cox concluded his remarks by introducing the first panel speaker, Michael Combs, Research Manager at the San Diego Regional Economic Development Corporation (EDC).

Michael Combs began by outlining the work of the San Diego Regional EDC and the CaliBaja Mega Region Initiative, which works to integrate the border region and leverage its assets. Mr. Combs discussed the need to work to attract, retain and expand companies, jobs, investment and talent in the region in order to promote economic prosperity and global competitiveness for the CaliBaja region. Mr. Combs noted that the study will not only help identify economic clusters in the region, but will also help identify new opportunities and approaches to economic development that we may not have identified before. Mr. Combs then introduced the next speaker, Alejandro Díaz-Bautista, Professor at the El Colegio de la Frontera Norte (COLEF).

Dr. Díaz-Bautista began by providing the members of the audience with some background on COLEF and outlining some of the previous studies the university think tank has conducted. He briefly spoke about trade statistics for signatories of NAFTA. Dr. Diaz-Bautista concluded by thanking SANDAG for inviting him and his colleagues at COLEF.

Daniel Flyte, Senior Research Analyst for SANDAG, began by introducing the agency's work as the MPO for the San Diego region. Mr. Flyte described the concept of industry trade clusters and described the process of researching and identifying those clusters. He outlined SANDAG's role in this research collaboration between COLEF, the San Diego EDC, and the greater CaliBaja Mega Region Initiative. Mr. Flyte explained the research method, including the analysis of trade inputs and outputs and location quotients in the region in an effort to identify the core cluster industries with high concentrations of economic interaction. Mr. Flyte clarified that SANDAG's role is to ensure objective data and analysis is produced so that this research is data-driven, theoretically sound, repeatable and transparent. Mr. Flyte concluded by stating that another goal of the study is to identify innovative solutions to the challenges

facing the border region. He then introduced the next panel speaker, David Shirk from the UC San Diego Center for U.S.-Mexican Studies.

Dr. Shirk began by thanking members of the research team for the efforts and contributions to the study. He spoke about the location quotient methodology used in the study and briefly explained how an equation was used to measure industry competitiveness in the region. Dr. Shirk described how the study was able to measure the concentration of specific sectors. He noted that manufacturing, specifically the audio/visual sector, is strong in the San Diego region; the study was able to quantify that the audio/visual manufacturing industry in the CaliBaja region accounts for 40 percent of the total North American share for that industry. In addition, Dr. Shirk stated that this study was part of a larger future study that will attempt to find and measure what related industries benefit from concentrations of other industries. He noted that the data used for this study was from 2008, but that new economic census data, up to the year 2013, will be released in Mexico in late 2014. He said the research team is looking forward to the release of the updated data and described how it will help further investigate the importance of manufacturing in the region. Dr. Shirk then thanked the audience members for their time.

Marney Cox welcomed questions or comments from the audience.

An audience member asked how the study and its information will be used to market the San Diego-Baja California region.

Mr. Combs answered that once the study is complete and the buyer-seller relationships are identified, outreach efforts that articulate those relationships will take place in an effort to inform and attract interested parties.

Marney Cox added that explaining the notion of “near-shoring” will help us articulate to companies looking to relocate that they can split their production between San Diego and Tijuana. Mr. Cox remarked that in the past, companies have had to look at China for this, but the CaliBaja region offers unique opportunities for this type of synergy.

Dr. Shirk stated that companies looking to relocate also look into the local workforce as a part of what makes a region competitive. He described how policies, planning and strategic thinking about the future of these industries are vital to the success of the region.

Christina Luhn of the CaliBaja Mega Region Initiative noted that if the data from the study does not constitute industry connections across the border, that information cannot be transformed into an opportunity for the region to enhance those connections. She questioned whether there are parts of a cluster that are missing that we should work to attract or grow.

Michelle Jolliffe of Casas International asked the panel whether or not the study took the cost of living and doing business in California into consideration. She noted that many of her clients manufacture in Mexico, but are not located in California, and wondered how the clusters would be marketed.



David Shirk noted that the study does not factor in the costs of doing business in California.

Michael Combs articulated the importance of marketing and informing companies of the opportunity to access a talent pool on both sides of the border and of the opportunity to work with industries similar to theirs within close proximity.

Marney Cox concluded by stating that the goal of the study is to investigate and inform the public and private sector of what industries we current have in the border region. He explained that the first step in the process of bringing new companies and industry clusters to the region is to identify our current inventory of industries and how to build upon it.

## 6. PANEL REFLECTIONS, ROUNDTABLE, AND OPEN DISCUSSION: ADDRESSING CHALLENGES AND OPPORTUNITIES FOR AN EFFICIENT BORDER

Moderator and Former California State Senator Denise Moreno Ducheny opened up the panel reflections and roundtable discussion by outlining some of the work the Borders Committee and stakeholders have done in the past to advance the promotion of the border region. She then introduced each panelist, outlined the goals of the panel discussion and highlighted the importance of having these dialogues and seminars for the advancement of the border region.

Mario Orso, Corridor Project Director for Caltrans, District 11, began the panel discussion by describing how innovation in the border region is essential to its future. He noted that the border of the near future will look a lot different than the border of today because of the growth and investment taking place. He said that in order to be successful, regional stakeholders must leverage existing facilities and infrastructure, and manage them as a single system using up-to-date technology. Mr. Orso concluded his introductory remarks by describing the importance of both sides of the border, from the private and public sectors, working together, in an effort to build a 21st century border.

Luis Duarte, Secretary for Urban Action at the Colegio de Arquitectos de Tijuana, began by informing the audience of the work his organization does both in Mexico and the United States. He continued by speaking of the benefits this type of forum provides for the public, private and academic sectors. Mr. Duarte informed the group that he and his team were recently contracted by the City of Tijuana to help with six different planning projects and that they want to continue being part of the strategic planning process at the border by assisting with the technical aspect. He concluded by noting that there are students currently studying how to better design and promote the next generation of infrastructure at the border.

James Clark, Executive Director of the San Diego-Tijuana Smart Border Coalition, began his remarks by describing a study his organization funded which found that both San Diego and Tijuana benefit greatly from a border that is “frictionless” and moves goods and people efficiently. He noted that in today’s globalized world, regions that expand across borders are more important for the global economy because of the ability to be innovative. Mr. Clark concluded his remarks by commenting that the border presents an opportunity for the region to draw new industries, but that we need a more efficient border in order to attract the companies.



Jason M-B Wells, Executive Director of the San Ysidro Chamber of Commerce, began by stating that the border region is a place with many opportunities, but also many challenges. He stated that the federal government's efforts to make the border more efficient have been working. He noted that over the last decade there has been a continual growing interest in promoting the opportunities and consistent work to solve the challenges at the border. Mr. Wells described some of the challenges the border area is facing, including the public transportation development plans. He informed the audience of the joint efforts of the five border region congressional representatives to receive federal funds to implement Phase III of the San Ysidro border crossing expansion and reconfiguration project, and praised their efforts for coming together on the issue.

Paola Avila, Executive Director of the Mexico Business Center at the San Diego Regional Chamber of Commerce, began by outlining the work of the Chamber and its binational efforts and focus. She noted that the Chamber leadership recently changed and therefore a new strategic plan was drafted that includes reinforcing crossborder trade as one of its goals. Ms. Avila stated that people are becoming more optimistic about the future of the border region, including many congressional and senate representatives who are pushing for new border-related policies that will improve trade and the mobility of individuals. She noted that these border region advocates are not only people that have been working on border issues for years, but also new individuals and coalitions that are enthusiastic about improving the border region. Ms. Avila mentioned a few policy initiatives which will improve conditions at the border, including a California Trade Office located in Mexico, as well as the continuation of the Trade Corridor Improvement Fund. She concluded her introductory remarks by stating that the surrounding infrastructure at the border, such as city streets, is an important element which should also be taken into consideration by the local, state and federal governments.

Cindy Gompper-Graves, Executive Director of the South County Economic Development Council, began the discussion by posing questions to the audience pertaining to the border and potential innovative solutions that could be implemented to increase efficiency. She discussed some of the differences between the northern and southern borders of the United States and brought up ideas about how technology and data sharing could play even larger roles in making the border more efficient. She concluded by describing the idea of a joint meeting area where stakeholders and border officials could meet without having to cross the border.

Senator Ducheny outlined the notion of a "choke-point" and how to better design future border projects to avoid delays. In addition, she asked the audience about ways to encourage new innovative solutions to bring people from both sides of the border together. She asked what the next level of planning that COBRO and the Borders Committee should take on and what future roles they should play in strengthening collaboration.

Mr. Wells reiterated the importance of technology and information sharing between the government agencies on both sides of the border.

Mario Orso discussed the many updated technological components that the Otay Mesa East Port of Entry project will employ, which will allow for improved communication between the two countries. Mr. Orso outlined the concept of a virtual cloud, which is a data sharing

software currently being used by SANDAG and Caltrans, which will hopefully be shared with Mexican officials in the future. Mr. Orso commented that innovation is the key to building an efficient border, as well as finding new ways to bring the public and private sectors together. He referenced innovation in the supply chain process as one example of how to start thinking of new ways to improve border efficiency.

Senator Ducheny then invited the audience members to share questions or comments.

Miguel Aguirre, a San Ysidro community property owner, noted the importance of design in border project plans. He wondered about how to begin breaking down misconceptions of the border region and said that a couple good places to start would be a student exchange between the two countries and to make the border crossing a more dignified experience for people. Mr. Aguirre spoke about the recent study conducted to design a new San Ysidro border transit station and some of the challenges he sees with the proposed plan, including mobility and loss of private property. He noted that the border transit station is an opportunity for the region to gain new development investments in the area, and that the planning and design need to fit the needs of the future.

Efraín Ibarra, Assistant Director of the South County Economic Development Council, commented on the varying border crossing times and how the length of time to cross greatly depends on the efforts of U.S. Customs and Border Protection officers. Mr. Ibarra noted the importance of having the federal government's presence at this type of seminar.

Senator Ducheny noted that although many of the same stakeholders continue meeting about border issues, the work that has been done has come a long way; years ago there were no regular COBRO meetings, there was no second Port of Entry at Otay Mesa in the works, and there was not as much binational interaction at the federal level. She observed that meetings like the binational seminar have facilitated many of the conversations that stimulated some of the projects we see today such as the San Diego-Tijuana Airport Crossborder Facility, and thus there is a need to continue the dialogue between interested parties. She asked the audience about the next steps moving forward to continue such binational discussions that advance the border region. Since much of the dialogue on efficiency is focused on trade, she posed a question about how to facilitate commerce and cargo truck crossings.

Carl Nettleton of Nettleton Strategies LLC remarked that work has been done to improve the movement of goods, people and vehicles at the border in a more efficient way. Mr. Nettleton suggested that the conversation should shift to figuring out how to more easily move ideas, culture and relationships across the border. He noted how this effort would require stakeholders from both sides of the border to continue fostering relationships and innovation.

Michelle Jolliffe from Casas International spoke on behalf of the private sector and wondered why other private sector business representatives were not at the meeting. She then enquired about who was invited to the seminar and noted the importance of members of the private sector attending these meeting because they too are affected by the decisions made in the border region.

Mr. Wells commented that it is the role of Chambers of Commerce and EDCs to represent the interests of the private sector companies at this type of event.

Hector Vanegas, SANDAG Borders Program Manager, informed the group that the COBRO email distribution list was used to promote the event and that invited organizations were encouraged to forward the invitation to other interested parties.

Michelle Jolliffe from Casas International noted that she attended the seminar because it was close to the border area where she works, and that there are many other people in the private sector whose business is affected by border infrastructure and who are not aware of events like the binational seminar.

Paola Avila stated that the media representatives present at the seminar will report to the public on the outcome of the forum in an effort to inform them of what occurred at the seminar and how it might pertain to them. In addition, SANDAG will publish a summary of the event. She continued that often times, businesses that do crossborder business are not to send staff to forums or meetings because they are busy waiting in the long border crossing lines. Ms. Avila pointed out that Chambers of Commerce and EDCs help share information with business owners, but that more engagement of the private sector is needed.

Senator Ducheny agreed that more involvement is needed from the private sector, specifically in terms of communicating the needs of the border region to the federal government.

A member of the audience remarked that the fundamental challenge for the region is to establish a prospective exercise that includes the social and private sectors in order to clearly define a local vision for what we want. He continued that there is a need to merge federal goals and plans with local ones in order to make sure the efforts coincide and are more effective.

John Minto, Chair of the SANDAG Borders Committee, suggested that stakeholders break into smaller groups and meet more frequently to discuss border-related issues in an effort to promote involvement from other levels of government. In addition, he noted that more people should attend the Borders Committee meetings.

Cindy Gompper-Graves noted that people attend meetings because it means something to them, not just to learn from the presentations. As an example of a potential issue that would motivate stakeholders to get involved, she described how there is an opportunity to move cargo in a different manner with the reactivation of the regional binational rail-line. Mrs. Gompper-Graves stated that people will either rally around an opportunity or a challenge, and the rail-line is both, but the only piece missing is for someone to take the lead on the reactivation initiative.

Senator Ducheny echoed Ms. Gompper-Graves' remarks and also noted the challenge with reactivating the rail-line lies in getting someone to lead the efforts.

Mario López from The Border Group stated how the goals and expectations for the border have changed since security became more of a focus, and for that reason, it is time that the vision is realigned to match today's border region. He suggested a monthly meeting take place amongst the stakeholders in order to develop a priority list and a vision for securing resources from the state and federal government.

Senator Ducheny suggested reaching out to new allies, potentially other California cities like Los Angeles and San Francisco that can also be partners in these efforts.

Kevin Swanson from Syntropic Systems noted the need to invest in the community and establish a mapping and street address system in Tijuana to increase security and better serve the public.

A member of the audience described how San Diego residents tend to forget about Mexico and that Tijuana is our neighbor to the south. He noted that support is lacking from local residents to address many of the problems facing the border region, and as such, little attention is given from state and federal governments. He proposed one idea to change the views of San Diego residents is to partner with Baja California and market Tijuana as a potential market for people looking to purchase a home who may be unable to do so in the United States or San Diego.

David Shirk thanked SANDAG for its work and for putting on forums like the binational seminar to foster institutionalized dialogues to move the border forward. Dr. Shirk described how educating the public about border issues is important. He also described how focusing on a crossborder student exchange program would be a great place to start educating the public on issues, and also to promote collaboration and knowledge sharing between the United States and Mexico. He noted that there should be a collaborative effort to encourage the region's educational institutions to officially establish a crossborder higher education consortium or an agreement on a student exchange program or even a library exchange program between the two countries.

Mario Orso recognized that forums like the binational seminar allow for identifying opportunities for advancement. He commented that although the work and vision for the border won't happen overnight, progress has been made, and he encouraged the group to continue participating in these forums. Mr. Orso noted that communication and partnership between the private and public sector on both sides of the border is what makes the difference and makes joint action feasible.

Laura Araujo from Tijuana Innovadora briefly described the work of the organization and how it publicizes many of the border issues being discussed in an effort to promote community involvement. She encouraged the seminar attendees to take advantage of the border forum discussions and to continue making individuals aware of how border issues impact them.

Senator Ducheny ended the panel reflections and introduced Dr. Paul Ganster to share some concluding remarks.

## 7. SEMINAR CONCLUSIONS

Dr. Paul Ganster restated some of the main themes discussed during the forum. He noted that many of the issues at the border need to be addressed by both countries, but that first, a new vision for moving today's border forward must be established. He described how this new vision must be innovative and take into consideration how we can leverage resources to bring prosperity to the region. Dr. Ganster described the need to determine where the border region wants to go, and then discuss the specifics on how to get there. He spoke on the importance of sharing data having factual and statistical bases on which to justify many of the improvements and changes border region stakeholders want. He then introduced Hon. John Minto to give the final seminar remarks.

Hon. John Minto concluded the seminar by thanking the members of the audience, as well as the panelists for their time. He also thanked SANDAG staff for their help in organizing the seminar.



### **Thematic Highlights from the 2014 Binational Seminar**

In order for the San Diego-Tijuana region to be vibrant and competitive in North America and on a global scale, it needs to be innovative and look to the future, finding new tools to improve systems, including the introduction of new technology wherever it has the potential to increase efficiency.

#### **Border Management**

1. We need to think about how we can leverage existing resources in order to bring prosperity to the region through more coordinated cooperation across the border.
2. Regional stakeholders must leverage existing facilities and infrastructure, and manage them as a single transborder system using up-to-date technology.
3. Provide and share factual, statistically based data on both sides of the border that can inform policy decisions and help justify many of the improvements the border region needs.
4. Collaboration and partnerships among stakeholders are essential for unifying the border region and advancing projects in order to achieve the shared goal of increased efficiency.
5. Surrounding infrastructure at the border, such as city streets and non-motorized transport systems, is an important element that should also be taken into consideration by the local, state, and federal governments.
6. Increased private sector involvement is needed for communicating the needs of the border region to the federal government as well as to the state government.
7. The fundamental challenge for the region is to conduct a prospective analysis that includes the community and private sectors along with other stakeholders in order to clearly define a local vision for what we want. The prospective should also include challenges and opportunities.
8. Innovation in the supply chain process is one example of how to start thinking of new ways to improve border efficiency.

9. Based on a positive feasibility study, we should support the effort to reactivate the regional binational rail line in order to move cargo in a different manner and relieve vehicular congestion and long wait times for trucks at the border and open new economic development opportunities.

## **Promotion**

10. Jointly promote the border region as a binational economy.
11. Work to attract, retain, and expand companies, jobs, investment, and talent in the region in order to promote economic prosperity and global competitiveness for the CaliBaja region.
12. Promote the San Diego-Tijuana border region as a destination for companies to locate manufacturing facilities to take advantage of crossborder joint production capacity, as well as the region's prime location for accessing markets in the North American and the Pacific regions.
13. Partner with Baja California to market Tijuana to people looking to purchase a home who may be unable to do so in the United States or San Diego.

## **Education**

14. Support crossborder educational exchange and outreach to build critical human capital necessary to improve regional competitiveness and to support enhanced binational collaboration and diplomacy, reversing ingrained negative stereotypes about the border region.
15. Support the region's educational institutions efforts to establish a crossborder higher education consortium to enhance student exchange programs, foster joint research, and facilitate library exchanges and joint degree programs as well as other actions to develop a binational group of future leaders.
16. Educating the public and public sector about border issues is important.